Economic Research Service

Agriculture Information Bulletin Number 664-9

April 1993

Issues for the 1990's: RURAL ECONOMY

Financial Market Intervention

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Issue. Affordable financing is an important factor in a firm's long-term investment decisions and its day-to-day operations. Adequately financed businesses can adjust to market and technological developments in ways that increase productivity and spur development. Rural financial markets appear to meet the needs of most established rural businesses. But startup businesses, and even mature businesses in some localities, may face financial constraints. The right combination of government-sponsored programs can help alleviate their financing problems, leading to increased investment and rural job growth.

Context. Rural financial institutions and markets have become increasingly integrated with national and international financial markets over the past three decades. But, for the typical small business, financing is still available only from financial service providers having a physical presence in the borrower's community. Since rural communities have few lenders and investors, rural businesses have fewer alternative sources of financing than do their urban counterparts, a particularly vexing problem if local banks and private investors cannot meet a small business firm's financing needs.

Surveys of small businesses indicate that both urban and rural firms are generally satisfied with their access to credit. But research has also shown that entrepreneurs and new firms still in the startup process face severe financing constraints. Regulations imposed to ensure the safety and soundness of the banking system and traditional behavior discourage banks from providing business capital to firms that are not well established. And, a limited supply of investor financing in rural communities means that the vast majority of new businesses must be self-financed. In addition, even well-established creditworthy firms in certain markets may face credit constraints. Small firms located in rural communities served predominantly by large financial institutions may have trouble accessing credit since large banks prefer to make large loans. Conversely, larger firms (but not large enough to directly tap regional financial markets) and firms in a rural community's dominant industry may have trouble finding credit if the area is served by only small lending institutions, which have to be concerned about loan portfolio diversification.

Rural startup businesses having difficulty accessing debt or equity financing are particularly disadvantaged. Formal seed and venture capital funds operate almost exclusively in urban markets where information and transaction costs are minimized. And, rural financial institutions are less likely to take advantage of the risk-sharing financing tools that urban banks use to make risky lending opportunities more attractive. Small rural banks are less likely to originate guaranteed loans, sell loans or loan participations, or refer their customers to other financial service providers. As a result, deals that might be made in a highly competitive urban market are less likely to be made in rural areas.

At Stake. Because of the small size of most rural communities, local financial markets are less competitive than those in urban communities. Investment and job generation in rural America will be slowed if this lack of competition leads to a disparity in access to credit. New business ventures are most likely to be affected, but even well-established firms in certain rural markets may not be able to take full advantage of investment opportunities because of credit constraints. Efforts to foster a vibrant rural economy will be far less successful if the financing needed for worthwhile business opportunities is not forthcoming.

Alternatives. Radical changes in the way credit is allocated are not called for since the existing financial system appears to work well for most businesses seeking debt financing. But, the Federal or State governments can take several steps to improve the operation of rural financial markets. Problems often center around an inadequate exchange of information between borrowers and lenders, and from underuse of alternative sources of funding and mechanisms for distributing risk. Government programs aimed at improving the ability of entrepreneurs and small business owners to prepare realistic business plans and loan applications could reduce loan denials. Other programs that help small banks to evaluate loan requests from new and unfamiliar businesses and to use loan participation arrangements could increase the flow of funds to riskier applicants and to applicants that might wrongly be considered risky. Government support for an information clearinghouse, providing rural bankers with both technical information and easy access to expertise, could help. Easing paperwork and other requirements of loan guarantee programs, such as those operated by the Small Business Administration and the Farmers Home Administration, might also increase their appeal to lenders, making credit more available to riskier loan applicants.

The current system does not always work well for new businesses or rapidly expanding firms needing equity financing in rural areas. Lack of information on alternative sources of financing often discourages rural firms from seeking equity capital. Government support for an information exchange that matches potential investors with prospective entrepreneurs could help. In addition, government-financed seed or venture capital programs specifically aimed at assisting rural businesses could be considered. Most private and public equity funds concentrate their activities in urban areas where fast-growth, high-tech firms are easily found. Public programs aimed at fostering long-term growth in emerging rural industries are rare. Rural areas could benefit if federally assisted small business investment corporations were encouraged to make more equity investments in startup firms rather than making collateral-based loans to existing businesses. Revolving loan funds, which use government appropriations to attract private financing, can also be helpful, particularly if they are chartered to assist new firms. A number of Federal programs provide grants or low-interest loans to help capitalize revolving loan funds, but these funds usually assist expanding businesses rather than startup firms.

Steps encouraging heightened competition within rural financial markets could also benefit rural businesses and residents. Relaxed branching restrictions for banks operating within the State could lead to more competitive rural bank markets in some States. Recent steps to broaden the lending authority of rural electric and telephone cooperatives and the Farm Credit System could eventually increase competition among rural lenders as well. Changes in lending authority need to be carefully considered, however, to ensure that unfair advantages do not ultimately reduce competition in local financial markets. Greater use of Federal and State guaranteed loans and revolving loan programs could further increase interbank competition by encouraging rural lenders to broaden the geographic size of their service areas. As the number of potential lenders increases, rural businesses should find it easier to obtain financing.

Agenda. Proposals have been made to establish a network of privately owned community development banks to lend to new and expanding businesses, and for a small business technical extension service, modelled after the agricultural extension service, to give small businesses easy access to technical expertise. Legislative proposals to allow interstate bank branching and allow the Farm Credit System to begin making loans to rural nonfarm businesses are also expected.

Information Sources. Three U.S. Dept. of Agriculture, Economic Research Service reports: James J. Mikesell and Felice S. Marlor, *Nonmetro, Metro, and U.S. Bank-Operating Statistics, 1990*, SB-846, 1992; Daniel L. Milkove and Patrick J. Sullivan, *Deregulation and the Structure of Rural Financial Markets*, RDRR-75, 1990; and Clifford Rossi, *Rural Conditions and Trends, Special Report on Financial Institutions and Markets*, 1991. Also see: G. Rogers, R. Shaffer, and G. Pulver, "The Adequacy of Capital Markets for Rural Nonfarm Businesses," *The Review of Regional Studies*, Vol. 20, No. 3, Fall 1990.

Economic Research Service

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Issues for the 1990's: RURAL ECONOMY

Value-Added Agriculture as a Growth Strategy

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Issue. Many rural areas faced with a declining number of farm jobs consider the food processing sector as a source of potential income and employment growth. By adding value to farm products, the food processing sector is seen by some analysts as a key element of a rural growth strategy.

Context. In 1992, food processing in the United States employed 1.7 million workers in some 20,000 establishments. The sector accounts for 1.3 percent of all jobs and 2.1 percent in nonmetro areas. The food processing sector is small, compared with the farm sector, with 2.5 farm production jobs for every food processing job. The food processing sector, which is quite diverse, comprises 46 food and beverage manufacturing industries, including meatpacking, fruit and vegetable processing, distilling, breadbaking, and ice manufacturing. But, the sector is also highly concentrated, with just seven industries (poultry processing, bakeries, red meat packing, bottled and canned soft drink manufacturing, sausage production, fluid milk production, and miscellaneous food preparations) accounting for more than half of total employment and just under half of all establishments.

Employment in the food processing sector declined 1.7 percent during the 1980's. There is much diversity among food processing industries, in terms of employment changes. Fifteen industries increased employment in the 1980's while 31 experienced losses. Poultry slaughtering and processing gained the most jobs (43,500), followed by miscellaneous prepared foods (16,300). In contrast, the bottled and canned soft drinks industry and red meat packing lost the most jobs (28,500 and 18,800). Sixty-nine percent of all food processing jobs are located in metro counties. Nonmetro food processing jobs are concentrated in just nine industries, which account for two-thirds of all employment.

Nonmetro counties gained nearly 40,000 food processing jobs during the 1980's while metro areas lost 80,000, suggesting some interest on the part of food processors in locating new establishments in nonmetro areas. Nonmetro employment growth in the food processing sector occurred primarily in the poultry slaughtering and processing industry (26,700 jobs) and to some extent in sausage production (7,700), red meat packing (6,800), and the miscellaneous prepared foods industry (6,300). The large-scale growth in the poultry processing industry is due to low-wage labor and a favorable climate in the Broiler Belt (Delmarva Peninsula, the Southeast, Arkansas, and Texas). Nonmetro employment growth in red meat packing during the 1980's was partly caused by a large-scale expansion in the fed cattle industry in the Central and Southern Plains, and an associated decline in processing activity in Corn Belt metro counties.

At Stake. Some rural areas have good prospects for attracting new food processing plants or expanding employment in existing plants. However, reliance on the food processing sector as a critical source of employment growth in the 1990's is likely not a viable option for most local and State economies. No significant employment increases are expected in the sector during the 1990's, partly due to widespread industrial restructuring in food processing during the 1980's. Any gains by rural areas will probably have to come about through intense competition with older, more-established industries in metro areas. Indeed, the process of restructuring, in which many industries underwent mergers and acquisitions and replaced labor with capital investment, has raised questions about the fundamental stability of the sector in certain locations.

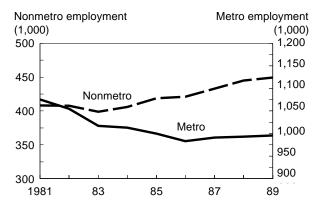
Alternatives. The potential for food processing industries to provide new jobs for a rural community largely depends on whether local areas can supply competitively priced raw inputs for local processing facilities. This means that job prospects in the food processing sector are expected to be confined mostly to areas already specializing in these products. However, new uses of farm products and new crops have received considerable attention as a way to enhance farm income and provide rural jobs. For example, kenaf, an annual hibiscus fiber crop, shows promise in the manufacturing of pulp and paper products such as newsprint or tissue. Guayule, a native shrub of north-central Mexico and southwestern Texas, is a potential source of natural rubber. And, crambe, an annual herb of the mustard family, and rapeseed produce oils that can be further processed into ingredients used in plastics, lubricants, and chocolate substitutes.

Agenda. Most rural areas need to look elsewhere for ways to retain or expand employment. Some may have good prospects based on their natural amenities or proximity to a large city. Others will need to learn how to reduce the costs of rurality—relative isolation, an absence of economies of scale, lack of services—by finding ways to connect rural firms and entrepreneurs to nodes of information, innovation, and finance, and to increase their access to growing global markets. This may require institutional support, such as an industrial extension program, to help firms effectively turn local resources and accessibility into a market advantage.

Information Sources. *County Business Patterns*, Bureau of the Census, annual, and *Employment and Earnings*, Bureau of Labor Statistics, monthly.

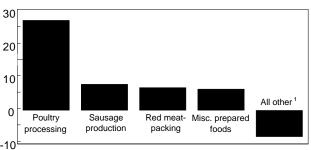
Metro and nonmetro employment

Employment continued to grow in nonmetro areas and decline in metro areas . . .



...but nonmetro growth is mainly concentrated in four industries.

Employment change (1,000)



¹Represents 23 industries in which employment rose and 19 in which employment declined.

Economic Research Service

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Issues for the 1990's: RURAL ECONOMY

Effect of Bank Consolidation on Rural Credit Availability

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Issue. Bank restructuring affects the local financial markets that rural borrowers rely on for credit and other financial services. While control of rural financial institutions is slowly being transferred to urban-based conglomerates, most banks serving rural areas are still rural headquartered. A reduction in the number of financial institutions serving rural communities might lessen competition and therefore increase the cost of credit or reduce its availability. Proposals to allow interstate banking and branching would accelerate the trend toward fewer but larger banking organizations. Rural business and community leaders worry about how the trend will affect rural economic growth.

Context. The number of commercial banks has declined since the mid-1980's. Part of this reduction is due to bank failures, which initially included many rural-headquartered banks affected by financial problems in the farming and energy sectors. But rural bank failures are now relatively rare. Instead, changes in the size and composition of rural bank markets are due to expansions and mergers of both in-State and out-of-State banking firms. Each State determines the forms of branching and holding company expansion permitted by banking firms already operating in the State, and whether out-of-State bank-holding companies can enter the State by purchasing existing or starting new banks. Most States allow at least some branching by banks chartered within the State, and a large majority permit bankholding companies based in other States to acquire banks within their jurisdictions. Nonetheless, rural bank offices are not the primary target in most bank acquisitions. And rural banks involved in mergers of bank-holding companies are likely just exchanging one outside owner for another. However, focusing on specific local markets, some mergers do reduce the number of banking firms with a local presence or ownership, and therefore may reduce availability of rural credit. The United States continues to have thousands more banks than other countries, but rural businesses typically have access to just the handful that maintain offices nearby and so can be greatly affected by any change in their local financial markets.

Consolidation of the banking industry can have both negative and positive consequences for rural communities. Some business people and community leaders fear that outside control of rural banks will limit credit availability as local bank deposits are transferred to more profitable outside investment opportunities. Outside banks may also pass up profitable local loans if they fail to accurately evaluate rural loan applications. This may occur because new managers are continually rotated to small rural branches to gain experience before moving on to larger urban offices, or because loan decisions are made by centralized loan committees with limited input from local branches. Those favoring bank consolidation argue that large, geographically diverse banks are less vulnerable to weak economic conditions in a particular region or economic sector. Large banks also provide a wider range of services and products, can handle larger loans, and are less likely to reject loan applications for new types of businesses.

Surveys of small businesses conducted in the 1980's have consistently shown that owners of rural businesses are generally satisfied with their bankers and the availability of bank credit. The data also provide evidence that urban and rural credit markets are well integrated in a national credit market. However, these surveys do not reflect the current regulatory environment that some argue has created a credit crunch. Nor do they provide information on firms that failed or never started due to an inability to obtain credit. Outstanding commercial loans at banks declined during the recession, and the media

provided anecdotal evidence of firms that lost access to credit. Nonetheless, it is difficult to determine whether or not credit is harder to find in rural areas compared to urban areas, or compared to conditions that existed in the 1970's and 1980's. Ratios of loans to deposits at rural banks are well below their historical highs. But is this due to a lack of demand as consumers and firms try to reduce debt levels, or does this reflect a widespread refusal by banks to make loans?

At Stake. Banks represent the primary source of credit in most rural communities and therefore directly influence the pace and direction of economic growth. Banks and other lenders were accused of exacerbating the recent recession by being overly conservative in their loan decisions in response to pressure from regulators not to repeat the errors that caused so many financial institutions to fail during the 1980's. Rural consumers and businesses are likely to find themselves operating in financial markets that are becoming more national and global in nature. Rural banking offices will not disappear, but over time more of them will belong to large banking organizations based in distant cities and States. Whether this change has a positive or negative effect on local credit availability depends, in part, on how competitive rural financial markets remain. If local competition is heightened, rural communities stand to benefit from the banking industry's consolidation.

Alternatives. Federal legislation could open the entire country to interstate banking and branching. Variants of this proposal give each State an opportunity to opt out of interstate banking by passing appropriate legislation within a specified timeframe, or require States to pass enabling legislation to participate in interstate banking. Large bank-holding companies argue that they could operate more efficiently, with benefits passed on to all of their customers, if they were able to convert bank affiliates to bank branches and to enter any market rather than those dictated by individual States.

Experience in States that have permitted widespread branching for many years suggests competition within local markets need not suffer when large urban-based banks move into rural markets. A significant proportion of community banks endure and prosper in statewide branching environments by identifying and serving markets and customers ignored by large banking organizations. This is likely to be the case whether or not interstate banking legislation is passed, as long as the current Federal Deposit Insurance System remains unchanged.

Some proposals for changing the current bank deposit insurance system could penalize rural banks. The system was designed to protect both individual depositors and the broader financial system by assuring that failure of one bank does not scare people into removing deposits from other banks. However, deposit insurance removes the incentive for depositors to closely monitor lending and investing activities of their financial institutions, adding to the cost of the financial system. To reduce this distorting effect, some have proposed lowering the effective ceiling on insured deposits held by individuals and their families. But community bankers and their supporters argue that this would unfairly penalize small banks. Because of concern about possibly jarring the Nation's economy, regulators tend to repay both the insured and uninsured portions of deposits at large failed banks, but not at small banks. If insured deposits are reduced and people expect regulators to continue to protect large banks, depositors might switch from small rural banks to offices of large urban banks, making it difficult for rural banks to compete.

Agenda. Comprehensive banking legislation was proposed in the last session of Congress, but a coalition representing groups such as community banks, insurance agents, and retired people was able to delete those sections addressing interstate banking and additional bank powers.

Information Sources. Two U.S. Dept. of Agriculture, Economic Research Service, reports: J. M. McGlone, "Rural Businesses Voice Few Complaints About Their Bankers," *Rural Development Perspectives*, Vol. 7, Issue 2. D. L. Milkove and P. J. Sullivan, *Deregulation and the Structure of Rural Financial Markets*, RDRR-75, Feb. 1990.

Economic Research Service

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Issues for the 1990's: RURAL ECONOMY

Preferential Tax Treatment for Capital Gains

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Issue. A major challenge facing the U.S. economy is the need to encourage greater investment to maintain a competitive edge in an increasingly interdependent world economy. Reinstating some form of preferential treatment of capital gains is one policy option being considered to encourage the formation of new businesses and increase investment. Preferential tax treatment of capital assets increases the relative rate of return on such assets by reducing potential income tax liability and provides incentives to invest in small business. Given the importance of capital income to farmers, the treatment of such income has important implications for farm output and asset values.

Context. The Federal income tax code has historically contained some form of preferential treatment for gains generated from capital assets. The preferential treatment of capital gains increases the rate of return to savings, and lowers the cost of capital, leading to an increase in the level of investment. That, in turn, raises gross national product (GNP). Since assets used in a trade or business are eligible for capital gains treatment, policies aimed at restoring some form of preferential treatment for capital assets have important implications for farmers. Agricultural assets eligible for treatment as capital income include breeding and dairy livestock and farmland. As a result of this treatment, capital gains is an important component of income for farmers. From 1987 to 1989, a minimum of 35 percent of farm sole proprietors reported capital gains. This compares to 11-13 percent of nonfarm returns over the same period. The average capital gain reported by farm sole proprietors ranged from slightly over \$13,000 to nearly \$16,000 from 1987 to 1989.

Between 1922 and 1986, as much as 60 percent of the gains from the sale of long-term capital assets were excluded from Federal income taxes. The Tax Reform Act of 1986 repealed the 60-percent exclusion for long-term gains and capped the maximum tax rate on realized capital gains at 28 percent, providing individuals subject to the maximum statutory marginal income tax rate a 3-percentage-point differential in tax rates. The repeal of the 60-percent exclusion for long-term capital gains resulted in a substantial increase in Federal income tax liabilities for farmers, especially livestock farmers. Repeal of the capital gains exclusion accounted for about half of the tax increase under the act, research estimates show. The resulting increase in tax liability associated with the sale of farmland that has been held for many years is a significant concern for farmers planning to dispose of farmland for retirement purposes. On the positive side, the repeal of the exclusion reduced the incentive to convert fragile rangeland and wetlands to cropland. Capital gains treatment was considered a major factor in such conversions.

At Stake. A lower tax rate on capital gains would reduce Federal income tax liability for many farmers. However, for both nonfarm returns and farm sole proprietors, a large portion of the resulting tax reductions would accrue to relatively high-income individuals. In 1989, approximately 48 percent of the capital gains reported by farm sole proprietors was reported by those with adjusted gross incomes above \$200,000.

Given other tax preferences in agriculture, a lower rate would encourage farm proprietors to adopt management practices designed to maximize income eligible for capital gains treatment. This lower rate would also spur investment in agricultural capital assets by nonfarm individuals. A lower tax rate on capital gains, if applicable to assets used in farming, would increase agricultural output and land

values. The resulting increase in investment in agriculture would occur in a capital-intensive industry already characterized by excess capacity. The increased rate of return on farmland would be capitalized in land values, increasing current farmland prices.

Alternatives. Several alternatives relating to preferential tax treatment exist:

- (1) Maintain the current 28-percent maximum tax rate on realized capital gains. Under current law, only individuals subject to the maximum 31-percent tax rate benefit from this differential treatment. These benefits would increase substantially if the top marginal income tax rate were increased to 36 percent. The 8-percentage-point differential could encourage individuals to invest more in agricultural assets such as farmland and breeding and dairy livestock to generate capital income rather than ordinary income.
- (2) <u>Index capital assets for inflation</u>. Under current law, taxes are imposed on nominal changes in asset values. Indexation would ensure that only real gains, not inflationary gains, would be subject to taxation. The primary benefits of indexing in agriculture would accrue to owners of farmland held for a long time, since a large part of the increase in value is often attributed to inflation. Other farm assets eligible for capital gains treatment, such as livestock, generally have a zero basis and, hence, would not benefit from indexation.
- (3) Enact legislation that provides a graduated exclusion depending upon the length of time the asset is held. For example, one recent proposal was to exclude the gains from assets held between 1 and 2 years, 2 and 3 years, and assets held 3 or more years at 10, 20, and 30 percent, respectively. This approach encourages long-term investment by increasing the tax benefits along with the length of time the asset is held. Since the exclusion of capital gains from taxable income is general, all farmers reporting capital gains would benefit, with the extent of benefits depending upon how long the assets were held and the individual's tax rate.
- (4) <u>Target preferential treatment to certain types of capital investments</u>. A recent example is a proposal that would have excluded 50 percent of the capital gains from newly issued stock of small companies held for 5 or more years. The advantages of this type of policy are that it would target specific types of investment deemed to be the most effective in stimulating the economy and creating jobs. Forgone tax revenue would also be reduced relative to a general capital gains exclusion. The implications for agriculture would depend upon the type of investments targeted to receive preferential treatment. Agriculture would not be a major beneficiary of a capital gains exclusion restricted to newly issued stock in small companies.

Agenda. Since the Tax Reform Act of 1986 repealed the exclusion of 60 percent of capital gains from taxable income, various proposals have been made to reinstate some form of preferential treatment for capital gains. While the preferential treatment of capital gains is a policy option to stimulate investment in small business in order to generate jobs and increase economic growth, the extent of preferential treatment must be balanced with the constraints imposed by the Federal budget deficit.

Information Source. Effects of Lower Capital Gains Taxes on Economic Growth, Congressional Budget Office, Aug. 1990.

Economic Research Service

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Issues for the 1990's: RURAL ECONOMY

Rural Economic Disadvantage

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Issue. Several economic indicators suggest that rural conditions worsened during the 1980's. The rural unemployment rate rose rapidly during the 1980-82 recessions and had not fallen back to its 1979 level by the onset of the 1990-91 recession. Rural per capita income and earnings per job fell further behind urban income and earnings during the decade. The rural poverty rate increased. And, half of all rural counties lost population. These indicators appear to be symptoms of a growing rural disadvantage in the emerging national and global marketplaces, thereby raising questions about the future well-being of much of rural America.

Context. Entering the 1980's, rural America seemed poised for strong economic performance. Growth in population, employment, and income in the 1970's had exceeded that of urban areas, narrowing the historical lag in rural well-being and greatly reducing rural population loss. But, a combination of factors prevented rural areas from further narrowing the gap in the 1980's. The 1980-82 recessions hit rural areas much harder than urban areas, primarily because job losses were concentrated in production occupations in manufacturing firms, where a higher proportion of rural than urban employment is concentrated. Rural manufacturing employment recovered slowly, not surpassing the prerecession (1979) number of jobs until 1989. These problems in manufacturing were combined with a farm crisis in the mid-1980's and job losses in mining in the last half of the decade. Evidence suggests these cyclical changes were accompanied by a long-term shift in rural competitiveness. Structural change in goods production reflects increasing global competition, technological change continues to displace production workers, and growing specialized producer services bypass rural areas.

At Stake. Continued rural economic deterioration could lead to increased outmigration to urban areas. From 1986 to 1988, 192 rural counties experienced net outmigration and more deaths than births. Some small communities in these areas may discontinue services when the cost of providing them rises above the remaining residents' ability to pay. Outmigration is also a concern for rural areas because the young, highly educated comprise a disproportionate share of those who leave. If rural areas cannot find ways to attract or create jobs requiring the skills of highly educated people, they may lose the group most likely to be the catalyst for improving local conditions. The Nation may also lose from rural outmigration as the costs of providing services in increasingly congested cities rise.

Alternatives. Views on equity and economic efficiency condition responses to rural-urban inequality and rural economic problems. Tight State and Federal budgets severely limit what could be spent to relieve rural problems. And, the wide variety of rural conditions calls for an array of responses, not a simple one-program-fits-all approach.

The National Initiative on Rural America, begun in 1989, established the President's Council on Rural America, a group of 19 rural leaders from the public and private sectors, to provide guidance to the President in setting a national rural development policy agenda. It also initiated State Rural Development Councils to assess local rural development needs and coordinate delivery of Federal, State, local, and private programs that respond to those needs. Most States are in the process of setting up Councils (47 States and territories are expected to have Councils by the end of 1993).

Funding for rural development-related projects comes from numerous Federal, State, and local programs. For example, the Small Cities Urban Development Block Grant program is administered by

the U.S. Department of Housing and Urban Development. Rural housing, electrification, and community facilities loan and grant programs are administered by various agencies in the U.S. Department of Agriculture (USDA). And, many States provide seed money to rural revolving business loan funds to which local governments often add their own contributions.

Agenda. The current Federal rural development agenda is built on the principle that local residents are the best judges of which rural development strategies are appropriate for their communities. Efforts to reduce the rural economic disadvantage in an era of tight government budgets will require creative input from all levels of government.

Information Source. U.S. Dept. of Agriculture, Economic Research Service, *Rural Conditions and Trends*, various issues.

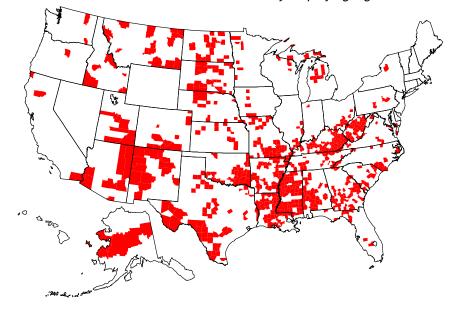
Nonmetro economic indicators, 1979-91 Unemployment, income, and earnings gaps widened during the 1980's, signaling increasing nonmetro disadvantage.

Year	Unemploy- ment rate	Difference from metro unemp. rate	Real per capita income	Ratio to metro income	Real earnings per wage and salary job	Ratio to metro earnings
	Percent	Percentage points	1990 dollars	Percent	1990 dollars	Percent
1979	6.1	0.5	13,086	77.2	18,732	79.3
1980	8.0	1.1	12,768	75.4	18,489	79.0
1981	8.5	1.2	13,015	75.9	18,614	79.4
1982	11.1	1.8	12,786	74.9	18,614	78.6
1983	11.2	2.1	12,711	73.9	18,435	77.7
1984	9.1	2.1	13,318	74.3	18,522	77.4
1985	9.1	2.5	13,445	73.4	18,435	76.5
1986	9.0	2.6	13,715	73.5	18,394	75.5
1987	7.9	2.1	13,821	72.9	18,272	74.6
1988	6.9	1.8	14,117	72.3	18,189	73.5
1989	6.4	1.5	14,491	72.9	17,938	73.4
1990	6.5	1.3	14,600	73.4	17,791	73.1
1991	7.6	1.1	NA	NA	NA	NA

NA=Not available.

Nonmetro counties with more than one economic stress indicator

Most States have at least one nonmetro county displaying signs of economic stress.



Nonmetro counties with at least 2 of the following characteristics:

- in lowest 20 percent of all counties by 1990 per capita income.
- in lowest 20 percent of all counties by 1990 earnings per wage and salary job.
- in highest 20 percent of all counties by 1991 unemployment rate.
- in highest 20 percent of all counties by 1989 poverty rate.
- experienced both net outmigration and more deaths than births during 1986-88.

Issues for the 1990's: RURAL ECONOMY

Economic Research Service

Rural Enterprise Zones and Economic Development

Agriculture Information Bulletin Number 664-14

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Issue. Federal enterprise zones are among the programs proposed to alleviate economic problems in distressed areas. Many States already have enterprise zone programs. But, do they work? How can such a program be designed to help in rural areas?

Context. Distressed areas often suffer from a combination of problems, including poverty, crime, unemployment, and a long history of failed economic development ventures. Many people believe that only a coordinated, multi-dimensional approach can overcome these problems and encourage businesses to grow in distressed areas. Enterprise zones, designated distressed areas that get special government assistance, are advocated as one such approach. In 1992, 35 States had enterprise zone programs. Most States have competitive programs where distressed communities compete with each other in the application process in order to receive State tax incentives for businesses that invest in enterprise zones. In such competitive programs, the State tax incentive lures competing communities to develop strategic plans for revitalizing their economies. These comprehensive plans usually employ a variety of local initiatives, including infrastructure improvements, loans to businesses, streamlined business permit processes, and community crime watch or literacy programs.

Evaluations of State enterprise zones have been generally positive. Some critics had feared that firms would simply relocate from neighboring communities into enterprise zones, but this does not appear to happen very often. Most of the employment growth in zones is due to firm startups or expansion of existing firms. Another fear was that a substantial share of the businesses claiming tax incentives would be free riders; that is, firms that benefit from doing things they would have done anyway. While there is ample evidence of free riding, this has not led to higher program costs per job than in other job creation programs. The most serious problem is that, despite the tax incentives and other zone-associated actions aimed at stimulating the economy, the economic performance of enterprise zones is highly variable, and some zones benefit very little.

Rural zones perform as well as, or perhaps even better than, urban zones, according to evidence from the few studies that examined rural (or small city) enterprise zones. The main drawback for rural areas is that only a small percentage of distressed rural areas have received enterprise zone status. Most large cities have at least one enterprise zone operating within their jurisdiction.

At Stake. Before a new Federal program is enacted, policymakers might want to consider alternative program features that could reduce program costs or increase benefits in rural areas. These include (1) the number of zones, (2) qualifications required for zone designation, (3) duration of zone designation, and (4) assistance provided to the zones. A key consideration in defining these program features is to recognize that when it comes to economic development policy, more is not always better. Emphasis should be on assuring that rural zones will effect productive development strategies.

Alternatives. Any prospective Federal program is likely to be patterned after 1992 proposed legislation, which would have created 25 urban zones and 25 rural zones. Some might argue for more rural zones, because 25 rural zones would cover only a small percentage of distressed rural communities. Expanding the number of zones, however, would add to overall program cost.

Significant expansion of the program could diminish the marketing appeal of the incentive, reducing program effectiveness.

The 1992 legislation would have allowed rural zones to be as large as 10,000 square miles, large enough to encompass several counties in the East, while requiring a population minimum of only 1,000. More restrictive requirements might reduce cost per zone, but the kind of flexibility provided in the 1992 legislation should pay off because it allows clusters of communities and even multicounty areas to work together in creating a coherent regional development strategy.

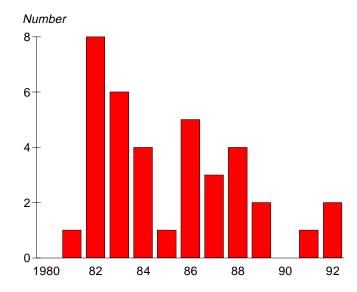
The 1992 legislation would have entitled each zone to 15 years of tax incentives. While some places might require that long to revitalize their economies, other places might be expected to have a quicker turnaround. If a shorter period, such as 5 years, were employed, program administrators could be given the flexibility to extend zone status for places needing and deserving more time. For places where little effort has been made to implement a development strategy, zone status could be allowed to expire long before the 15-year period is up.

Some have described the 1992 legislation's proposed Federal tax incentives as excessively generous. These incentives include exclusions from capital gains, expensing of stock purchases, wage credits for new hires, losses credited against ordinary income, and additional tax-exempt financing. The estimated cost for just the first 5 years of this program would be \$2.5 billion. Policymakers may want to consider only those tax incentives that give the most "bang for the buck," and give zones the opportunity to select among various tax incentives, grants, and loans, so they may fine-tune the package of benefits they receive.

Agenda. Federal legislation is likely in 1993. Some State governments may also consider creating or modifying enterprise zone programs.

Information Sources. Rural performance of State enterprise zone programs: Richard J. Reeder and Kenneth L. Robinson, "Enterprise Zones: Assessing Their Rural Development Potential," *Policy Studies Journal*, Vol. 20. Details on State enterprise zones and Federal enterprise zone proposals, such as the revised version of HR 11 vetoed by President Bush on Nov. 4, 1992: U.S. Dept. of Housing and Urban Development, Office of Community Planning and Development.

Number of new State programs enacted Interest in State enterprise zones peaked in the early 1980's.



Economic Research Service

Agriculture Information Bulletin Number 664-15

April 1993

Issues for the 1990's: RURAL ECONOMY

Effects of the Investment Tax Credit on Farmers

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Issue. Continued slow growth of the U.S. economy has prompted policymakers to explore a variety of alternatives for stimulating job growth. One alternative that promotes capital formation, and thus more jobs, is an investment tax credit for purchases of machinery, equipment, and similar eligible property. Agriculture is a capital-intensive industry. Thus, restoration of the investment tax credit could offer important benefits to some farmers.

Context. Investment in depreciable capital has been eligible for a 7- or 10-percent investment tax credit at various times over the past 30 years. Eligible assets in farming have included farm machinery and equipment, as well as certain livestock and farm structures. The investment tax credit provides a substantial reduction in the cost of capital, encouraging investment in eligible assets. Research examining the effect of tax policies on investment in agricultural equipment during 1956-78 found that over 20 percent of net investment was attributed to tax policies. The investment tax credit was the most effective policy tool in stimulating investment, the research concluded. Repeal of the investment tax credit by the Tax Reform Act of 1986 resulted in a substantial increase in the cost of capital. The act reduced the stock of farm machinery and equipment by nearly \$4 billion or nearly 25 percent relative to prior law, with the repeal of the investment tax credit accounting for approximately 89 percent of the decline, according to research examining the repeal's implications for capital investment.

While the investment tax credit is effective for stimulating investment, it favors certain forms of economic activity over others, discriminates among firms within a single industry, and encourages tax-motivated behavior. The tax credit distorts investment decisions by encouraging investments in assets or activities eligible for the credit rather than in those that would produce a greater economic return in its absence. In farming, the tax credit encouraged expanded investment despite excess supply for various farm commodities.

At Stake. The possibility that an investment tax credit in some form will be restored revives the debate regarding its implications for agriculture. The credit substantially reduces Federal income tax liability for many farmers. For example, prior to the repeal of the credit, about half of all farmers were eligible for an average tax credit of approximately \$1,400 per year. The benefit to large farms was even greater, with nearly 85 percent of farms with gross receipts over \$250,000 eligible for the investment tax credit. The average tax credit for these farms was over \$10,000. The tax credit also lowers the cost of capital, which encourages investment in eligible assets. This increased investment benefits farm machinery dealers and other input suppliers. It also expands the production capacity of the sector and induces productivity growth. This results in expanded production, which results in lower prices, and increased government costs for some farm programs. For some farmers, the reduced farm income associated with lower prices could more than offset the benefit from the investment tax credit.

Alternatives. Policy alternatives include: (1) continue current policy (no investment tax credit), (2) restore a broad-based, 10-percent investment tax credit similar to that which existed prior to the Tax Reform Act of 1986, (3) provide an incremental tax credit that would be applicable only for investment above a specified base or threshold amount, or (4) enact a targeted investment tax credit that would be available only for investment in specified classes of property determined to be the most productive.

Choices among these alternatives will be influenced by the perceived need to stimulate the economy, the estimated cost of each of the alternatives, and the ability to identify acceptable revenue sources to offset the estimated tax losses.

Restoration of an across-the-board investment tax credit of 10 percent is the least likely due to the substantial revenue loss to the government. In farming alone, the government could lose as much as \$1.5 billion a year in revenue. If a broad-based investment tax credit were enacted, it would likely be at a lower rate, reducing the effectiveness of the credit.

Enactment of an incremental tax credit for investment above a certain base would substantially reduce the tax drain. While this approach would favor some new businesses, it would provide little or no benefit to those firms that have invested heavily during the base period.

Under a targeted tax credit, a much narrower class of property would be eligible for a tax credit than prior to the 1986 law. While a targeted investment tax credit may be the most cost-effective alternative, it may be the most difficult to enact due to equity concerns that would arise by favoring certain industries or classes of assets over others. Under this alternative, the tax credit could be withheld on certain types of farm property, such as single-purpose agricultural structures, or on farms likely to expand production and increase the cost of government farm commodity programs in response to a tax credit.

Agenda. Numerous legislative proposals have been made to restore the investment tax credit. However, they have failed to gain broad-based support due to the rather large revenue loss associated with the proposed legislation. Nevertheless, given the recent support expressed for the enactment of an investment tax credit, a specific legislative initiative will likely be introduced early in 1993 as part of a fiscal stimulus package.

Information Sources. Michael LeBlanc, James Hrubovcak, Ron Durst, and Roger Conway, "Farm Machinery Investment and the Tax Reform Act of 1986," *Journal of Agricultural and Resource Economics*, Vol. 17, No. 1, Jul. 1992, pp. 66-79.

Issues for the 1990's: RURAL ECONOMY

Economic Research Service Improving Living and Working Conditions of Hired Farmworkers

Agriculture Information Bulletin Number 664-26

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April 1993

Issue. Hired farmworkers experience low wages, seasonal employment, weak attachment to the labor force, and limited options for higher paying jobs. In addition, many are excluded from coverage under basic worker protection programs generally available to other U.S. workers. Federal assistance programs targeted specifically to hired farmworkers frequently serve only a small portion of those eligible. These continuing disadvantages raise questions about the direction of efforts to improve their living and working conditions.

Context. Hired farmworkers comprise a small proportion of all U.S. wage and salary workers. But, they are an essential input to U.S. agriculture and contribute necessary labor during critical production periods. Almost half of all U.S. farms used hired labor in 1987; these farms produced about 84 percent of the total value of sales for farm products. Farmers spent almost \$13 billion for labor in 1987, accounting for 12 percent of total farm production expenses. Labor costs on the more labor-intensive fruit, vegetable, and horticultural specialty farms accounted for 37-44 percent of total farm production expenses.

An average of 884,000 hired farmworkers were employed per week on U.S. farms in 1991, according to the latest data from the Current Population Survey. Hired farmworkers were more likely than all wage and salary employees to be young, male, and Hispanic and they had lower education levels. About 55 percent of hired farmworkers in 1991 had not completed high school, compared with 15 percent of all wage and salary workers. The median weekly earnings of full-time hired farmworkers was \$240, or only 56 percent of the \$427 received by all full-time wage and salary workers. Because of the seasonal nature of agriculture, many hired farmworkers are employed for only part of the year, but depend heavily on their farm earnings. Some hired farmworkers seek nonfarm work to supplement their incomes, but are often unable to compete for higher wage nonfarm jobs because of limited education and labor market skills.

Many Federal and State worker protection programs have special exemptions for agricultural employers based on employee numbers, days worked, or payroll size. These special exemptions for agriculture were applied largely because of perceived administrative and enforcement difficulties, concern over high labor costs for small farmers, and less representation of agricultural worker interests. Employees working on these exempt farms do not receive program benefits. The Fair Labor Standards Act, for example, requires only those employers using more than 500 man-days of agricultural labor during any calendar quarter of the preceding calendar year to pay the Federal minimum wage. Other Federal programs, including unemployment insurance, Social Security, and provisions of the Occupational Safety and Health Act (OSHA), also exempt some agricultural employers based on number of employees and/or size of payroll. Farmworkers are fully covered by State workers' compensation laws in only 14 States and partially covered in 23 others.

Federal programs sponsored by the U.S. Departments of Education, Labor, and Health and Human Services, among others, have provided a variety of employment, training, education, and health care services to hired farmworkers. Program evaluations suggest, however, that only a relatively small proportion of those eligible actually receive program assistance.

At Stake. Improvements in Federal assistance programs and basic workplace protection could help improve living and working conditions of many hired farmworkers. At the same time, these efforts could

lead to greater Federal program costs and/or substantially higher labor costs to some farmers, particularly growers of fruit, vegetable, and horticultural crops. Increased labor costs could be passed on to consumers in the form of higher prices and could lead to increased foreign competition for some commodities.

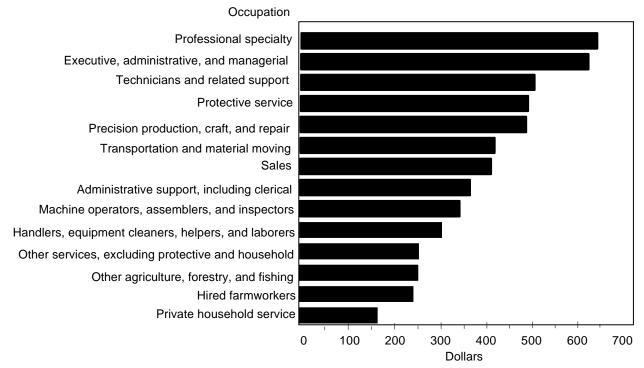
Alternatives. Two broad strategies could be followed. One strategy focuses on Federal assistance directed specifically to those low-skilled, low-income workers who depend heavily on farmwork. Current Federal programs provide a variety of employment, training, education, and health care services to hired farmworkers. Increased funding, expanded eligibility criteria, better service delivery, and improved coordination among programs could help extend program benefits, but at increased government costs. A second strategy calls for the removal or modification of agricultural exemptions in basic workplace protection programs. Such a strategy would extend to hired farmworkers the programs and benefits available to most other U.S. workers. Costs for expanding worker protection programs, such as minimum wage guarantees, unemployment insurance, occupational safety and health programs, and workers' compensation, would largely fall on farm employers currently exempt from program coverage. Costs of expanding Social Security coverage would be shared by both farm employers and their employees.

Agenda. Congressional hearings in 1990, 1991, and 1992 focused on a wide range of farm labor topics, including the socioeconomic well-being of hired farmworkers and the lack of workplace safeguards for many farm laborers. Although no legislative action is pending in early 1993, issues relating to the living and working conditions of hired farmworkers will likely receive continued congressional and media attention.

Information Sources. Two U.S. Dept. of Agriculture, Economic Research Service, reports: Victor J. Oliveira, *A Profile of Hired Farmworkers, 1990 Annual Averages*, AER-658, Feb. 1992 and Jack L. Runyan, *A Summary of Federal Laws and Regulations Affecting Agricultural Employers, 1992*, AIB-652, Aug. 1992. Also see: U.S. General Accounting Office, *Hired Farmworkers: Health and Well-Being at Risk*, report to congressional requesters, GAO/HRD-92-46, Feb. 1992.

Median weekly earnings of full-time wage and salary workers

Only private household service workers earned less than hired farmworkers.



Source: 1991 Current Population Survey microdata earnings file.

Economic Research Service

Agriculture Information Bulletin Number 664-27

May 1993

Issues for the 1990's: RURAL ECONOMY

Trends in Numbers, Sizes, and Ownership of Farms

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Issue. The trend toward fewer, larger, and increasingly corporate farms has created a concern that many midsized family-owned farms will disappear. The trend has implications for the ownership and control of farm resources, concentration of farm production, distribution of farm program payments, distribution of farm-generated income, and farm career opportunities for young people. Some interest groups cite possible links between the structure of farming and the security and resilience of the food system, as well as to the viability of rural communities.

Context. The number of farms has been declining since a peak in the 1930's, while average farm size has increased, as measured by either value of output or number of acres. And, very large farms have been increasing their share of farm production. Less than 2 percent of all farms now account for nearly 40 percent of the value of U.S. farm output. Changes were most dramatic from the early 1950's through the mid-1970's. The number of farms declined by 52 percent, from 4.78 million to 2.31 million between 1954 and 1974. The trends have slowed since the 1970's. The share of farm product sales accounted for by farms with sales of \$500,000 or more (measured in 1982 constant dollars) increased from about 25 percent in 1974 to nearly 40 percent in 1987. The number of corporate farms has also increased, but most are family-held corporations.

At Stake. There are two conflicting views on the proper role of agricultural policy in attempting to influence trends in farm numbers, sizes, and ownership: (1) advocacy of a farm structure consisting of midsized farms owned and operated by individual families (family farm system), and (2) letting market forces determine ownership of agricultural resources.

Advocates of the family farm system emphasize sociological and environmental arguments, contending that a large number of midsized, family owned and operated farms will promote a stronger overall rural economy and promote more ecologically and environmentally sound stewardship of agricultural resources than would an agriculture dominated by large-scale farms. They further argue that a farming system dominated by a few large-scale producers would result in monopolized control over food production and higher consumer food prices.

Advocates of letting market forces determine farm structure emphasize competitiveness, economic efficiency, and productivity arguments. They argue that farms need to get large enough to obtain economies of scale inherent in state-of-the-art production technology to most efficiently use their resources. This will result in the greatest resource and labor productivity, maintain the competitiveness of U.S. agriculture, and keep consumer food costs lower than would a farm system composed of farms of less than technology optimum size.

Alternatives. General classes of policy alternatives include:

- (1) Continue current policies and programs (status quo).
- (2) Alter farm programs to stop them from favoring larger farms. Since many payments are production-based, large farms tend to receive a disproportionate share of payments (see *Distribution of Direct Government Payments*, AIB-664-37). Lowering and strengthening payment limitations and targeting

payments to smaller farms can make current commodity programs more size neutral. Strengthening limits on ownership of federally irrigated land and controls on delivery of water above these limits can improve the size neutrality of Federal irrigation projects.

- (3) Strengthen policies to overtly favor beginning farmers or small family farms. Expanded public credit, beginning farmer, and disadvantaged farmer programs are examples.
- (4) Pass laws to limit nonfamily involvement in farming. No Federal policies fit this category, but some States have restrictions on corporate ownership and/or operation of farmland.

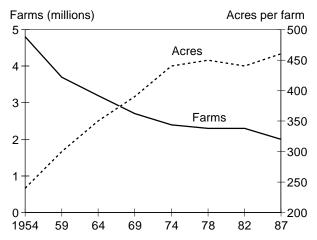
Choices among these alternatives are based as much on beliefs and values held by people or policymakers as they are on fact. Research shows that the most important underlying causes of farm structural change have been: (1) increases in labor productivity stemming from technological advances, and (2) higher wage rates in nonfarm industries discouraging people from farming. These forces for change will continue as our economy grows and develops. Farm structure will continue to adjust to its economic and technological environment. Policy changes acceptable to the public can only slightly alter these forces and their resulting trends.

Agenda. No Federal legislation directed specifically at controlling the number, size, and ownership of farms has been proposed. Rather, arguments from both points of view have been marshaled in debate of related legislative proposals and program provisions. This is expected to continue, but no specific legislative initiatives are expected.

Information Sources. Two U.S. Dept. of Agriculture, Economic Research Service, reports: Donn A. Reimund and Fred Gale, Structural Change for the U.S. Farm Sector, 1974-87, 13th Annual Family Farm Report to Congress, AIB-647, May 1992, and Mitchell J. Morehart, James D. Johnson, and David E. Banker, Financial Performance of U.S. Farm Businesses, 1987-90, AER-661, Dec. 1992.

Farm numbers and average farm size

Farm numbers and sizes have nearly stabilized since the mid-1970's.



Farms and farm product sales

The proportion of small farms has stabilized, but concentration of sales by large farms continues to increase; farms remain over 90-percent family owned.

	All	farms	All sales		ales		All farms		All sales	
Real value of products sold	1974	1987	1974	1987	Type of organization	1974	1987	1974	1987	
		Pe	rcent				Pe	rcent		
Less than \$10,000	48.1	48.6	3.7	2.4	Sole proprietorship	89.5	86.7	67.6	56.3	
\$10,000-99,999	42.7	36.9	36.4	20.6	Partnership	8.6	9.6	13.9	17.1	
\$100,000-499,999	8.5	12.8	34.7	37.5	Family corporation	1.7	2.9	18.0	19.5	
Over \$500,000	.7	1.6	25.2	39.4	Nonfamily corp.		.3		6.1	
					Other	.2	.6	.5	.9	

Economic Research Service

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May 1993

Issues for the 1990's: RURAL ECONOMY

The Rural Apparel Industry

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Issue. Continuing technological advances, changes in product market structures, and probable bilateral trade liberalization will likely reduce the size and change the structure of the U.S. apparel industry. How can communities heavily dependent on these industries respond to such important developments?

Context. During the 1980's, employment in the apparel industry contracted significantly in response to increases in labor productivity and intensified foreign competition. Many of these foreign competitors have long ceased being just low-cost assembly sites for less expensive items; they now produce even the highest quality, most sophisticated fashion. These trends are likely to continue to exert downward pressure on industry employment. This pressure will intensify if trade liberalization reduces the level of protection for the U.S. industry.

Many nonmetro areas depend on the apparel industry. Of 771 nonmetro counties in 10 Southeastern States, 209 had 20 percent or more of their 1987 private nonfarm employment in the textile mill and apparel product industries, principally clothing and apparel fabric. Forty-seven percent of these 771 nonmetro counties had 10 percent or more employed in these industries. In some States, the nonmetro rates were much higher. For example, 56 percent of South Carolina's nonmetro counties, 46 percent of Alabama's, 43 percent of Georgia's, and 39 percent of North Carolina's nonmetro counties had more than 20 percent of private nonfarm employment in textile mill and apparel products. More than half the nonmetro counties in 7 of the 10 States had more than 10 percent of their employment concentrated in these industries.

The importance of apparel industry employment to individual nonmetro counties extends well beyond the absolute percentages because, as manufacturing industries, these sectors constitute a significant portion of the local economy's "export base," or the industries which bring most new income into the area.

At Stake. Continued downsizing of the apparel industry will cause the employment base to contract in many southeastern communities, and affect employment prospects of many rural workers. A significant share of the affected families will have incomes below or near the poverty level, and will thus be very vulnerable to any income loss. In recent years, dislocated apparel workers have had above-average difficulty finding new jobs at comparable pay levels. Part of the reason is that dislocated apparel workers have lower educational levels than the average dislocated worker, and are more likely to be older, female, and members of a minority group. Worker adjustment therefore may well be more difficult, even in communities with a relatively good supply of alternative job opportunities. Unsuccessful local adjustment could stress the region's cities as well as rural areas by increasing the inmigration from rural areas of unemployed, low-skilled workers, and the cost of welfare and social service programs in both urban and rural areas.

Alternatives. There are two general classes of policy alternatives:

(1) <u>Expand worker adjustment assistance</u>. The public sector could increase adjustment assistance to dislocated workers as employment declines continue. Extremely high average apparel turnover rates of

approximately 50 percent each year, coupled with a traditional male reluctance to work as a sewing operator, means some job openings for those wishing to work in the apparel industry are likely to exist, even in the face of accelerated dislocation. However, geographic mismatches will exist in many local economies between apparel jobs that are lost and available job openings within the industry. This suggests communities could help dislocated workers who wish to remain in the industry find new apparel jobs by developing better information on job openings within the region, helping to arrange for supporting services such as alternative transportation or child care, and, where appropriate, assisting in relocation.

For dislocated workers who wish to leave the industry, and for other workers in affected communities who lose or cannot find a job, job search assistance, retraining for employment in other sectors, retraining for self-employment, and relocation assistance could be offered. A major issue is the level of support that should or can be provided. For example, of two major Federal programs now targeted to help dislocated workers, the Trade Adjustment Assistance program usually supports much longer training periods than does the Job Training Partnership Act Title III program. A corollary issue is whether separate funding sources should be dedicated to training for those affected by trade liberalization.

(2) Emphasize business development. The public sector could also help improve the competitiveness of the domestic apparel industry (in order to minimize dislocation), work to develop alternative employment opportunities in hard-hit regions, or both. Regarding the first, one option is to encourage formation of "Quick Response," just-in-time production partnerships among fabric, apparel, and major retail firms, particularly ones involving small- and medium-sized enterprises. The public sector might also help accelerate the development and use of new products and manufacturing processes, augmenting competitive strength by increasing levels of research and technology diffusion. More traditional job creation activities, such as business assistance and infrastructure investment, could also help offset local employment losses.

Agenda. Worker/community adjustment titles will likely be considered as part of enabling legislative packages accompanying any trade agreement sent to Congress, such as a General Agreement on Tariffs and Trade or a North American Free Trade Agreement. Such packages have not yet been designed. Many States have programs (industrial engineering assistance, customized job training, and small business financing) that assist firms and workers in the apparel and apparel fabric as well as other industries. These programs may be revisited with proposals for change.

Information Sources. U.S. Dept. of Commerce, *U.S. Industrial Outlook*, annual. Statistical reports of the American Textile Manufacturers' Institute, *Textile Hi-Lights*, quarterly. The American Apparel Manufacturers' Association, *Focus: An Economic Profile of the Apparel Industry*, annual.

Issues for the 1990's: RURAL ECONOMY

Economic Research Service **Assisting Farm Entrants**

Agriculture Information Bulletin Number 664-39 Fred Gale (202) 219-0525 Neal Peterson (202) 219-0523

May 1993

Issue. Many farm operators will reach retirement age in the coming decade, but fewer young people are entering farming to replace them. Many farm advocates and policymakers suggest that government should assist new farmers, warning that low farm entry will reduce the farm sector's production capacity and increase the concentration of farm ownership among fewer, but larger management units.

Context. Farm youths have been the major source of new farm entrants, but their numbers declined substantially in recent years. And, the farm operator population has aged. In 1987, the last Census year, 45 percent of farms were headed by individuals 55 years old or older. Based on the current age distribution of farm operators and historical rates of entry and exit by age group, farm numbers are projected to decline to between 1.9 to 1.6 million by the year 2002, depending on the rate of entry (see figure).

Many are concerned that high capital requirements for farming and difficulties obtaining credit prevent young persons with little equity from entering farming. Thus, the land and other assets of retiring farmers are often consolidated into existing farms, rather than being sold or rented to new entrants. This reinforces the trend toward fewer, larger farms. In response to these concerns, policymakers have created programs offering direct assistance to beginning farmers. The 1992 Agricultural Credit Improvement Act (Public Law 102-544) provides for direct loans, guarantee of commercial loans, and interest rate subsidies to beginning farmers and ranchers through the Farmers Home Administration. About 20 States also have active beginning farmer assistance programs. Some privately operated programs are also in place, such as volunteer programs that match beginning and experienced farmers in a mentor-type relationship.

The primary reason for low farm entry is the attractiveness of better paying, less risky nonfarm careers, according to research. This raises questions about the effectiveness of using subsidized credit programs as the primary way to increase the number of farm entrants. Most young farmers are able to reduce their credit needs by renting land rather than buying, using off-farm income to fund entry and expansion, and getting help from family members in acquiring land.

Entering farmers tend to be more productive than retiring farmers. Though farmers 65 years old and older outnumber those under 35 by three to two and control twice as much land, their sales are only slightly larger (see table). Young farmers are more educated and make greater use of new, more efficient technology, machinery, and management practices. They have substantially more machinery and equipment and operate much larger farms than their elders did when they entered farming.

Policymakers frequently argue that as the number of farmers declines, local nonfarm businesses experience declining sales and possible closure leading to rural economic decline. But, research suggests that, for most rural communities, the impact of declining farm numbers is minor. Fewer and fewer rural places depend primarily on farming as their major source of income and employment. Manufacturing, recreation-retirement, and service industries have become the dominant rural employers in most rural communities. The remaining farm-dependent rural areas are concentrated in the western Corn Belt and Plains States. Farmers, particularly those operating small noncommercial farms, depend on the nonfarm economy for off-farm jobs.

At Stake. Domestic demand for farm products is fairly stable, while farmers are becoming increasingly productive. Thus, the Nation's supply of food and fiber is not threatened by the declining number of farmers and farm entrants. Changes in entry rates into farming do have longrun implications on the degree of concentration of U.S. farm production. Given the current Federal budgetary pressure, policymakers interested in facilitating entry into farming may need to look beyond traditional farm commodity and credit subsidies for strategies to assist beginning farmers.

Alternatives. Efforts to increase export demand for U.S. food and fiber could help raise farm incomes, thereby encouraging young persons to enter farming. Efforts to develop new crops and industrial uses of farm commodities that expand total demand for food and fiber would similarly create

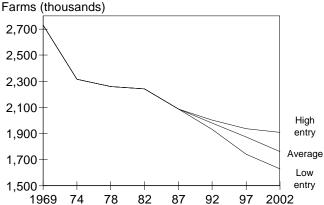
opportunities for new farmers. Economic growth and nonfarm job creation in rural areas is critical for young farmers who often rely on off-farm employment for family income and capital expenses.

Agenda. The 1990 farm act will expire in 1995. Policymakers will be monitoring trends in farming and financial condition of farmers in preparation for the upcoming farm bill debate.

Information Source. Fred Gale, "What's Behind the Declining Farm Count?" *Agricultural Outlook*, AO-186, June 1992.

Number of U.S. farms, actual 1964-87 and projected 1992-2002

The decline in farm numbers depends on entry.



Farm characteristics of principal farm operator

The youngest farmers are generally more productive and efficient than the oldest.

	_	Age of farm operator			
Characteristics	Unit	Under 35	65+		
Structural characteristics ¹ :					
Number of farms	1,000	279	447		
Land in farms	Mil. acres	101	199		
Acres per farm	Acres	362	446		
Sales	Bil. dollars	17	18		
Sales per farm	Thous. dollars	63	41		
Value of machinery and equipment per farm	Thous. dollars	39	23		
Education ² :					
Not high school graduate	Percent	12	44		
High school graduate	do.	48	34		
Post-high school	do.	40	22		
Financial ratio ² :					
Debt-asset ratio	Percent	25	6		

¹Source: 1987 Census of Agriculture, Bureau of the Census.

²Source: 1990 Farm Costs and Returns Survey, USDA-ERS.

Economic Research Service

Agriculture Information Bulletin Number 664-40

April 1993

Issues for the 1990's: RURAL ECONOMY

Ethanol Production and the Rural Economy

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ISSUE. Among strategies to enhance farm income and provide rural jobs is development of new uses for farm products. The recent history of ethanol production illustrates how such strategies may unfold.

Context. U.S. ethanol production capacity is about 1.1 billion gallons a year at 39 currently operating facilities. Actual production was just over 900 million gallons in 1991. The eight largest plants account for 87 percent of total ethanol output and have production capacity ranging from 40 million to 280 million gallons per year. Large-scale ethanol plants are capital intensive, employing about three workers per million gallons of production. The larger plants use corn as a feedstock; seven of the eight largest plants are located in the Corn Belt. Nearly 96 percent of the Nation's ethanol is made from corn. About 6 percent of the 1990 corn crop was processed for ethanol.

More than half of ethanol plants produce less than 10 million gallons per year. Many of these are niche plants designed to use locally available, but commercially unusable, feedstocks. For example, cheese whey, potato waste, molasses, and brewery waste are relatively low-value food processing residues that can be transformed into a higher value product; their use solves a waste disposal problem. Such feedstocks often come at low or even negative cost to the ethanol producer. Use of an otherwise waste product as an input into the ethanol production process also provides benefits to society.

Demand for ethanol may grow rapidly due to clean air standards that are to be implemented in stages beginning in 1993. Substantial increases in ethanol production will result in crop substitution and increased farm and farm-related employment. Doubling ethanol production to 2 billion gallons per year by 1995 would require a 3.4-percent increase in production of corn, the primary feedstock for U.S. ethanol production. Prices and production of soybeans and other grains, such as wheat, sorghum, oats, and barley, would also be affected, some gaining and some losing value. Ethanol production will generally move the farm sector toward more market orientation as prices for corn and other grains move higher and as government deficiency payments decline.

Increasing annual ethanol production to 2 billion gallons by 1995 could create almost 28,000 jobs: 15,000 in farming and farm-related activities, 10,000 direct and indirect jobs from ethanol processing, and 3,000 temporary jobs from new plant construction. A majority of these jobs will be in the Midwest corn growing areas and many of the farm and farm-related jobs will go to rural residents. However, some farmers may choose to work additional hours rather than hire new workers and some of the new jobs may represent only part-time or seasonal employment opportunities. Nonfarm jobs associated with increasing the productive capacity of the ethanol industry, plant construction, and plant operation will be in communities that can meet the infrastructure and raw material needs of large plants. Industry experts suggest that an optimal-size, state-of-the-art ethanol facility should have a productive capacity of 100 million gallons per year.

At Stake. Hard-pressed rural communities are looking for ways to improve income and employment opportunities. A community's success in attracting a new 100-million-gallon ethanol facility will mean adding about 370 temporary jobs during the construction phase and about 840 permanent jobs during the operational phase. For communities with adequate resources, such increased employment means greater diversity in the economic base and more opportunities for growth.

Alternatives. Small- and medium-size cities in the Corn Belt are the most viable candidates to meet the basic requirements for large plants. The region produces abundant supplies of corn, its small- and

medium-size cities have adequate labor to build and operate the plants, and many of the communities already have grain production, handling, processing, and transportation facilities as major parts of their economic base. Increased ethanol production will simply require an expansion of these sectors.

Most small, isolated rural communities cannot support large-scale ethanol plants. However, integrating ethanol production with other agricultural activities, such as production of a feedstock or use of byproducts, allows cost-competitive production on a smaller scale and offers additional employment opportunities. Examples of four integrated facilities are Garden City, Kansas, where ethanol byproducts are used in cattle feedlots and aquaculture, an Idaho plant where potato processing wastes are used as a feedstock, and two California plants where cheese whey from dairy processing is used as a feedstock.

Local communities may also benefit from emerging technologies that lower the cost of producing ethanol from renewable, nonfood feedstocks consisting primarily of cellulose. Organic wastes, agricultural crops, and forest products are all potential energy biomass feedstocks. Cellulosic conversion technology will make ethanol production possible in areas where sufficient biomass feedstock is available from agricultural activities (rural areas) or accumulated waste products (urban or suburban areas). Introducing energy crops (fast-growing trees and a variety of grasses) into the local agricultural economy, particularly on marginal lands, could lead to some increases in farm income and jobs, both on and off the farm.

Initially, biomass conversion plants are likely to be small-scale, perhaps 10 to 50 million gallons of ethanol per year. Some of these operations will locate in or near urban centers to solve problems of organic waste disposal. But, because most of the energy biomass will be grown in rural areas, the new biomass technology will improve the ability of rural America to effectively compete in ethanol production.

Agenda. The effect ethanol will have on farm income and rural job growth will largely be determined by the role it will play in meeting national clean air standards. Additional expansion of the industry will depend on a continuation of current favorable conditions, including extension of the Federal gasoline tax exemption. Ethanol's role will likely be debated for some time by public officials.

Information Sources. Two U.S. Dept. of Agriculture, Economic Research Service, reports: Neil Hohmann and C. Matthew Rendleman, *Emerging Technologies in Ethanol Production*, AIB-663, 1993, and Michael LeBlanc and John Reilly, *Ethanol: Economic and Policy Tradeoffs*, AER-585, 1988.

Jobs and ethanol
Almost 28,000 jobs could be added if annual ethanol production reaches 2 billion gallons.

		Employment gains					
	U.S. ethanol						
Item	production capacity ¹	Construction ²	Direct ³	3 Indirect ⁴ Tota		— Agriculture⁵	All
	Mil. gallons			Jobs			
Current production	920						
Future production:							
Excess operating plant capacity	210		630	1,130	1,760	2,820	4,580
Proposed operating plant expansion	385	1,430	1,160	2,090	3,250	5,180	9,860
Proposed new plants	360	1,340	1,080	1,940	3,020	4,840	9,200
Idled plant capacity	183		550	990	1,540	2,460	4,000
Total	2,058	2,770	3,420	6,150	9,570	15,300	27,640

⁻⁻⁼Not applicable. ¹Based on data from Information Resources, Inc. ²A 100-million-gallon ethanol production facility takes 2 years and requires about 300 full-time construction workers. ³Assumes that the labor requirement does not change as the industry expands. ¹Includes employment increases induced by increased consumer expenditures for goods and services. ⁵Includes farm-related employment gains due to increased grain production. Total is allocated in proportion to all categories of future production.

Issues for the 1990's: RURAL ECONOMY

Economic Research Service Role of Government in Agricultural Finance

Agriculture Information Bulletin Number 664-49

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June 1993

Issue. Federal farm credit policy has focused on enhancing competition among farm lenders, supplying lenders with loanable funds, and providing subsidized credit to farmers unable to afford commercial credit. This policy has promoted the integration of rural capital markets with the national capital market and improved farmers' access to credit since the early part of this century. In addition, farm incomes are now comparable to nonfarm incomes and farm families are, on average, wealthier than nonfarm families. However, government farm credit programs played a critical role in resolving the farm financial crisis during the late 1980's and redistributing the losses sustained during that period. These developments raise questions about the role of farm credit subsidies.

Context. Federal credit programs were developed earlier in this century to overcome deficiencies in rural capital markets and respond to problems of poverty, tenancy, and disenfranchisement. Perceived deficiencies in rural credit markets included the high cost and short term of farm mortgages, large regional disparities in interest rates, and limited access to national financial markets which subjected farmers to swings in credit availability. Federal credit policies are primarily implemented by the Farmers Home Administration (FmHA) and the federally chartered cooperative Farm Credit System (FCS). Although privately owned, the FCS enjoys some tax advantages and Federal agency status on its bonds, allowing it to provide low-cost agricultural credit. The FCS and FmHA hold 37 percent of all farm debt.

Access to credit allows farmers more flexibility in production decisions and in financing intergenerational transfers of farm assets. It also affords farmers the ability to expand their earnings base more rapidly than would reliance on retained earnings. Credit needs of agriculture have grown as farms specialized, enlarged, and relied more on purchased inputs and technology. Without credit, farmers would have been slower to adopt productivity-enhancing technologies. Historical data on the use of debt, growth of mechanization, and increasing concentration of farm production suggest that American agriculture was greatly aided by access to credit. Thus, credit policy has had a direct effect on the number and size of farms.

Imprudent use of credit has a down side for individual borrowers, their lenders, and for the economy as a whole. Many experts contend that imprudent use of credit and credit subsidies was responsible for the run-up and crash of land values during the 1970's and 1980's. Because using credit increases a farmer's exposure to financial risk, heavy credit users are more vulnerable to fluctuations in income, input costs, and asset values. Subsidized credit tends to increase asset values and discourage prudent use of credit. Economic costs of poor credit policy include misallocation of resources and increases in the costs of financial distress of borrowers and lenders. For example, Federal credit programs to help farmers recover from natural disasters, such as floods or droughts, are often inadequate substitutes for alternative policies that would insure income; disaster loans only partially replace lost income and increase farmers' liabilities.

Credit needs of the past two decades varied widely. Farm credit expanded rapidly during the 1970's and rural lenders, especially banks, were sometimes constrained by liquidity considerations. During the 1980's, farm credit contracted rapidly as falling commodity prices and land values produced widespread

financial distress among farm borrowers and their lenders. Rural lenders recorded losses of \$20 billion during the crisis. Rescue and restructuring of the FCS required a new infusion of Federal funds (which will be repaid under the conditions established in the FCS Safety and Soundness Act of 1992). FmHA losses required a rethinking of program objectives. Today's eased farm financial stress, improved farm incomes, heightened competition among farm lenders, and more closely integrated rural and national capital markets make arguments for government intervention less compelling.

At Stake. Approximately 15 percent of farm operator households use the FHA and the FCS as their primary credit source. The financial strength of these producers would be affected the most by a change in Federal farm credit subsidy policy. Other producers would suffer if policy changes decrease competition among rural lenders. Subsidized credit may be important to smoothing intergenerational transfers of farm assets. In addition, private-sector lenders frequently have been reluctant to provide credit to beginning and minority farmers. However, adequate production of food and fiber in the United States does not depend on subsidized credit.

Alternatives. Policymakers might consider targeting credit programs. For example, an aging farm population, fewer new farm business start-ups, and the capital intensive nature of U.S. agriculture have heightened concern that individuals, particularly young or disadvantaged farm operators, will be unable to **own farm** assets. Government intervention might help some low-equity borrowers acquire essential farm assets and obtain a foothold in farming. However, targeted credit is not a complete replacement for insufficient farm incomes.

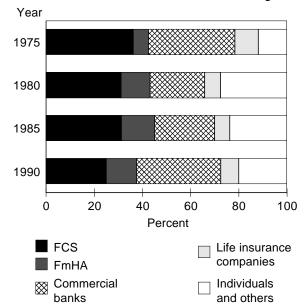
Such intervention could be delivered directly by the FmHA, through the Farm Credit System, or through the tax code. If provided through the FmHA, the assistance can take the form of subsidized and unsubsidized loans made and serviced directly by FmHA or commercial loans guaranteed by FmHA. Unsubsidized guaranteed loans are less costly than direct loans, but subsidized guaranteed loans can be more costly than direct loans. Changes to the FCS's charter could also provide a method for policymakers to target certain populations. Sale of federally tax-exempt bonds by State and local authorities is another option available to policymakers.

Agenda. Policy objectives to improve access to credit for beginning farmers and to streamline delivery of FmHA's guaranteed farmer programs were addressed by the Agricultural Credit

Improvement Act of 1992. Effectiveness of programs in meeting these legislative objectives depends on the formulation and implementation of regulations under this law. Legislative debate continues on laws governing the U.S. commercial banking system. Banking law changes alter the operation and structure of the industry and could affect the delivery of agricultural credit since commercial banks are a primary supplier of agricultural credit.

Information Sources. Three U.S. Dept. of Agriculture, Economic Research Service, reports: Agricultural Income and Finance: Situation and Outlook Report, AFO-48, Feb. 1993; Federal Credit Programs for Agriculture: Background for 1985 Farm Legislation, AIB-483, Nov. 1984; and Farm Financial Stress, Farm Exits, and Public Sector Assistance to the Farm Sector in the 1980's, AER-645, Apr. 1991.

Market shares of total farm debt Government share of farm debt is declining.



Issues for the 1990's: RURAL ECONOMY

Economic Research Service Rural Business Incubators and Economic Development

Agriculture Information Bulletin Number 664-50

Peter Stenberg (202) 219-0542

July 1993

Issue. Rural business incubators, which came to the forefront of local development policy in the 1980's, nurture emerging businesses. The assumption is that these new businesses, having survived the critical first stage of business development, will in turn contribute to more sustained local economic growth. Many State and local governments support business incubator programs and many areas are considering them as a way to stimulate job growth. But, do these programs foster local business development, particularly in rural areas? If so, what general approach works best?

Context. Rural business incubators are facilities that offer a unique supportive physical environment and business services to nurture start-up firms. Their goal is to improve the survival and growth rates for start-up enterprises. Incubators may be located in a building, a portion of a building, or a group of buildings. They provide physical and logistical services, shared office services, and business consulting services. Ownership of the facilities is fairly evenly spread among universities, 2-year colleges, private nonprofit organizations, local government, and for-profit corporations. The number of incubators nationwide grew nearly tenfold from 1984 to 1991, reaching approximately 450. Incubators have become increasingly popular as a part of a broader rural economic development program, such as a rural enterprise zone. Rural areas have 28 percent of all incubators (as of 1991), with most rural incubators founded since 1987.

There have been no empirical studies on the long-term effectiveness of incubators, but several small case studies suggest that success varies and those incubators designed to address targeted enterprise development objectives, such as supporting start-up electronics firms, have more success creating jobs. This is particularly important for incubators in rural areas because the local economy usually has limited diversity. While a few incubators do house one or more mature firms, there is no evidence that incubators merely induce firms to change location within a region. Research has also affirmed that incubators largely nurture homegrown businesses; most of the incubators' entrepreneurs, prior to establishing their business, had lived for many years in the same area as the incubator.

Incubators should not be perceived as quick fixes for a community's depressed economy. The actual number of jobs created in an incubator will be relatively small because the program is designed more for the long-term economic health of a region than for a shortrun increase in employment or income. The intent is to help several fledgling businesses get started in the hope that eventually some of them will leave the incubator to prosper and grow in the region. Successful firms typically leave the incubator after 1-2 years.

At Stake. While incubators can contribute to a region's longrun economic growth, establishing an incubator in rural locations offers special challenges. Incubators are expensive to develop, typically costing more than \$500,000, and difficult to fund. Very few are self sufficient and many have no realistic plan for achieving self-sufficiency. Most rural facilities find it hard to develop financing for businesses wishing to enter an incubator. Hence, an important precondition for developing incubators is revolving sources of capital. Management assistance can be difficult to provide when a rural area has few business consultants. The relatively small pool of entrepreneurial clientele in rural areas and the limited ability to attract entrepreneurs from other regions, including other rural areas, impedes incubator development.

Alternatives. What success means for a particular business incubator depends on the aim of the developer(s). The general aim of incubator developers is rural economic growth in their region. Business incubators accomplish this goal by increasing the number of ventures that survive the critical early stage of business formation. An incubator also encourages an increase in local business startups. While incubators serve as facilitators of funding and business assistance to firms on their premises, this does not preclude firms from independently garnering the necessary knowledge or finances for their needs.

Successful rural business incubators build upon communities' strengths, not their weaknesses. The strengths may include the skill levels of potential employees, a specialty niche created by existing businesses, or the location of the community. Rural communities can improve the success of their incubators by making sure that market analysis is done for potential entry firms. This analysis could identify businesses most likely to succeed. Rather than focusing on the physical structure for the incubator, rural areas might focus on developing a solid support network for new ventures. Developers, in devising and implementing plans for their incubators, must allow for the incubation time needed for a given business and determine what firms are likely to succeed past the incubation stage and would likely then locate within the region. The necessary incubation time will vary according to the type of business and the socioeconomic characteristics of the rural area.

Rural business incubators work best as part of larger economic development strategies, specifically when they are tied into comprehensive support networks for start-up companies including business consultation and financial help for all stages of business growth. Local Small Business Development Centers (sponsored by the U.S. Small Business Administration), which are commonly housed on the campuses of local colleges, often are part of the support networks and lend business assistance. Effective community leadership, such as in building support networks, in tandem with appropriate rural incubator strategies (those designed to best take advantage of the local economic environment) can lead to the successful development of incubators. Rural business incubators will often be included in larger development plans, such as research or industrial parks and enterprise zones.

Funding to establish business incubators or to finance firms within the incubators has come from a multitude of private and public sources, including some Federal agencies (for example, the Small Business Administration, Department of Commerce, Office of Community Services, and Department of Health and Human Services). If correctly designed and managed, incubators often increase the success rates for their fledgling businesses. Businesses that are nurtured in them will usually remain in the community. Nonetheless, incubators should not be operated merely as general subsidy programs for the private sector. Incubator services must be targeted to those needs that are critical to the success of start-up firms and not otherwise provided in an effective manner.

Agenda. A rural development initiative that includes providing Federal assistance to rural communities, businesses, and individuals to improve the quality of rural life and increase employment opportunities in rural areas is part of the Clinton administration's comprehensive economic plan for the Nation. Congressional consideration of the plan has begun.

Information Source. Mark L. Weinberg, "Business Incubators Give New Firms in Rural Areas a Head Start," *Rural Development Perspectives*, 3(1987):6-10.

Economic Research Service

Agriculture Information Bulletin Number 664-51

August 1993

Issues for the 1990's: RURAL ECONOMY

Agriculture as a Rural Growth Strategy

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Issue. Farm jobs have declined during the past 15 years, and jobs closely related to farming have shown little growth. At the same time, the number of other agriculture-related jobs has increased. The issue is how to stimulate rural economic growth.

Context. Employment on farms in nonmetro counties diminished by almost 590,000 jobs (22 percent) during 1975-89 (see table). Technological changes that substitute capital for labor in farming explain much of the decline. These advances, coupled with periods of unfavorable economic conditions, caused all regions to lose nonmetro farm jobs. Declines ranged from 8 percent in the Pacific States to almost 32 percent in the Southeast.

While the numbers of farm proprietors and wage and salary farmworkers declined, industries closely related to farming -- agricultural services, forestry, and fisheries, agricultural inputs, and agricultural processing and marketing -- added over 70,000 jobs (4.5 percent). Nonmetro employment in industries weakly linked to farming, including wholesale and retail trade of agricultural products and indirect agribusiness, increased by 1.1 million jobs (59.8 percent).

Rural jobs increased the most in industries not related to farming, where growth exceeded 5.6 million jobs (42 percent). These employment trends indicate that nonmetro areas gained over 11 jobs in off-farm industries for each onfarm job lost; only 2 of these off-farm jobs were in farm-related industries. This job gain/loss ratio varies dramatically across the Nation. The Northeast, with little economic dependence on farming, added almost 48 jobs off the farm for each farm job lost. But the ratio was about six jobs gained for each farm job lost in regions more dependent on farming, such as the Plains States, Corn Belt, and Delta States.

More striking is the low job gain/loss ratio in farm employment-dependent counties. In the 335 counties where farming alone accounts for 25 percent or more of county employment, 59,556 farm jobs were lost while only 86,405 off-farm jobs were gained during 1975-89, a ratio of 1.5 (see figure). Most of these counties are concentrated in the western Corn Belt and Plains States. Farming is no longer the dominant industry in many other areas, as the number of farm employment-dependent counties has fallen from 750 to 335 since 1975.

At Stake. Farming's ability to create new jobs is limited. Employment trends indicate that areas most dependent on farming and closely linked industries for jobs will have difficulty sustaining or expanding economic growth unless these communities can diversify their industrial base. Although some farm-related industries, particularly wholesale and retail trade of agricultural products, may generate jobs, employment growth in wholesaling and retailing depends more on the growth of consumer markets than on the farm sector. Agricultural wholesale and retail trade industries probably cannot provide significant job growth in sparsely settled rural areas.

Alternatives. Counties where farming is important could increase employment by providing initiatives to encourage nonfarm businesses. Rural enterprise zones, rural incubators, or investment in technology to overcome problems of remoteness are among strategies that could be used to expand

nonfarm jobs. Developing new industrial uses for traditional farm commodities or for new nontraditional crops may also help sustain jobs in the farm sector.

Agenda. The administration's economic plan includes efforts to enhance rural business development. The U.S. Congress is considering these programs.

Information Source. T. Alexander Majchrowicz and Jacqueline L. Salsgiver, *U.S. Farm and Farm-Related Employment in 1989: Where Are Jobs in Farming and Its Related Industries Most Important?* AIB-654, U.S. Dept. Agr., Econ. Res. Serv., Jan. 1993.

Farm production employment counties, 1990

Farming is the dominant industry in the western Corn Belt and Plains States.

Counties with 25 percent or more of total employment in farm production.

Nonmetro employment change in farm, farm-related, and nonfarm industries, 1975-89 Farm production jobs declined while other employment off the farm grew.

Nonmetro farming and farm-related industries								
Region	Farm production		Closely related ¹		Peripheral ²		Nonmetro nonfarm	
	1,000 jobs	Percent	1,000 jobs	Percent	1,000 jobs	Percent	1,000 jobs	Percent
United States	-589.6	(-21.9)	70.7	(4.5)	1,119.4	(59.8)	5,607.5	(42.0)
Farm employment- dependent counties	-59.6	(-19.2)	7	(-1.5)	10.6	(23.2)	76.5	(21.6)

¹Industries with strong linkages to farming, including agricultural services, forestry, and fisheries, as well as agricultural inputs and agricultural processing and marketing.

²Industries weakly linked to farming, including wholesale and retail trade of agricultural products and indirect agribusiness.

Issues for the 1990's: RURAL ECONOMY

Economic Research Service Rural Manufacturing Links to Rural Development

Agriculture Information Bulletin Number 664-52

G. Andrew Bernat, Jr. (202) 219-0539 David McGranahan (202) 219-0540

July 1993

Issue. Manufacturing faltered as an engine of rural growth in the 1980's. Rural manufacturing employment stagnated after growing by over 20 percent in 1970-80 and at even higher rates in previous decades. Considerable restructuring of urban manufacturing occurred in the 1980's, resulting in increases in high-skill jobs, productivity, and wages in contrast to rural manufacturing which became more associated with low-skill, low-wage jobs and low productivity gains. The slowdown in the growth of manufacturing jobs in rural areas and their continued dependence on low wages as an attraction to manufacturing firms raise questions about the development prospects of rural areas in a competitive global marketplace.

Context. From the 1950's until the 1980's, the national growth in manufacturing and its decentralization to rural areas produced about 1 million new manufacturing jobs in rural areas each decade. These jobs absorbed many people leaving agriculture and resulted in a shift in the economic base from agriculture to manufacturing in many rural areas.

Manufacturing now accounts for nearly 25 percent of personal income in rural America and 20 percent of rural jobs. Two and half times as many rural workers are employed in manufacturing as in farming, forestry, and fishing combined. Even in counties classified as farming dependent, about as many people work in manufacturing as in agriculture.

Rural manufacturing is characterized by low-skill, low-pay, routine production jobs. And in contrast to the situation in urban areas, there is little evidence of a shift in rural jobs toward higher skill levels. Low wages tend to make rural areas more competitive than urban areas for routine production activities, but heightened international competition and growing use of high technology mean the number of low-skill jobs is declining nationally. Workers in many countries are willing to work at lower wages than those received by U.S. workers, and high-technology, high-skill jobs appear to be more easily introduced into the production process in an urban setting, raising serious questions about the place of rural manufacturing in our rapidly changing national economy.

At Stake. Some rural areas have good growth prospects based on their natural amenities or proximity to a large city, but manufacturing is likely to remain critical to expansion of the economic base and employment of many rural areas. A transformation of rural manufacturing toward high-technology, flexible manufacturing production practices like those in urban areas seems essential to prevent eventual declines in rural manufacturing employment and wages.

Alternatives. Strategies to enhance the competitiveness of rural areas for higher skill, higher wage, and higher productivity manufacturing could focus principally on rural workers or on rural firms and entrepreneurs. It does not appear, however, that the lower skill level and education of the rural workforce has been the major bottleneck to restructuring rural manufacturing. In fact, rural areas have not been able to hold on to the more highly educated members of the workforce they do have. Rather, the main bottleneck appears to be the effects of rurality: isolation, an absence of economies of scale, and few agglomeration economies. A more effective approach to fostering the desired restructuring is likely to be to reduce the costs of rurality, to connect rural firms and entrepreneurs to nodes of information, innovation, and finance, and to increase their access to growing global markets.

An industrial extension program, similar to the one that has helped the agriculture industry, is one model for delivering such support. Such institutions would function like the private, and often informal, institutions in urban areas that serve the same purpose.

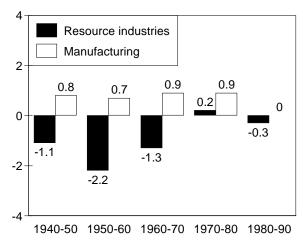
Agenda. The administration's economic plan includes a rural development initiative that would provide Federal assistance to rural businesses and communities and an initiative to provide incentives and opportunities for communities to explore new technologies for increasing productivity such as developing broadband, interactive telecommunications networks. Congressional consideration of these proposals has begun.

Information Sources. Three U.S. Dept. of Agriculture, Economic Research Service, reports: David A. McGranahan and Linda M. Ghelfi, "The Education Crisis and Rural Stagnation in the 1980's," R. Long, coord., *Education and Rural Economic Development: Strategies for the 1990's*, AGES-9153, Sept. 1991, pp. 40-92; David A. McGranahan, "Thriving Rural Economy in the 1990's?" *Agricultural Outlook*, AO-182, Jan.-Feb. 1992, pp. 35-37; and G. Andrew Bernat, Jr., "The Rural Economy in the 1990's: The Role of Manufacturing," *Agriculture's Changing Horizon*, proceedings of the 69th Agricultural Outlook Conference, Mar. 1993.

Change in nonmetro manufacturing jobs, 1940-90

Nonmetro manufacturing job growth stopped in the 1980's.

Millions

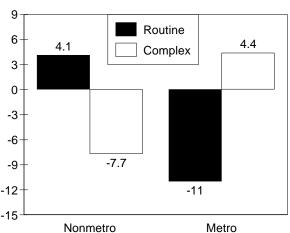


Source: U.S. Census Bureau. Note: Uses 1983 metro classification.

Change in nonmetro routine and complex manufacturing, 1980-88

Routine jobs grew and complex jobs declined in nonmetro manufacturing; the reverse occurred in metro manufacturing.

Percent change



Source: USDA, ERS.

Economic Research Service

Agriculture Information Bulletin Number 664-54

July 1993

Issues for the 1990's: RURAL ECONOMY

Persistent Poverty in Rural Areas and Small Towns

Calvin Beale (202) 219-0535

Issue. The incidence of poverty has historically been higher in rural and smalltown (nonmetro) areas than in large city and suburban (metro) places, creating a special rationale for rural development policy. After 1960, when poverty data were first collected, nonmetro poverty rates fell rapidly as the economy diversified, many poor people moved to urban areas, and the number of workers commuting to metro areas increased. In spite of that trend, many nonmetro counties have continued to suffer high levels of poverty throughout the last three decades, with no further progress since 1980. This raises the question of the nature and extent of problems in such areas, and poses the policy issue of how the affected populations can achieve higher levels of income that are more consistent with national standards.

Context. The U.S. incidence of poverty was 13.1 percent in the 1990 census, 12.1 percent for metro people and 16.7 percent for nonmetro people. The definition of poverty, varying by size of family, was income of less than \$13,254 in 1989 for a household of two adults and two children. In 783 nonmetro counties, 20 percent or more of the population had poverty-level income, a level more than one-half higher than the national rate. The great majority (546) were counties of persistently high poverty, where the rate was above 20 percent in each census from 1960 to 1990 (see map).

There are people in every part of the country who are poor because of a temporary economic problem or a disadvantaging personal condition, such as physical or mental disability, responsibility for children without assistance from a spouse, or death of a spouse. Even very prosperous counties have poverty rates of 6-8 percent. But the persistence of poverty among 20 percent or more of an area's population reflects an entrenched syndrome of poverty-related conditions. These include a chronic shortage of moderate- to well-paid jobs (leading to a large number of poor working families), usually accompanied by substandard educational attainment, above average income concentration, extreme poverty among many of the poor, a comparative dearth of urbanization, and (except in the Southern Highlands) the presence of longstanding ethnic disparities and conflicts. The areas are often still struggling with the long-term consequences of past displacement of tenants and hired workers from the traditional extractive industries of farming, mining, and timber work.

The persistent-poverty counties can be characterized overwhelmingly as having one of four ethnic or regional characteristics. With few exceptions, their high poverty reflects low income levels in the black, Hispanic, and American Indian or Alaskan Native populations, or their location in the core of the Southern Highlands, either Appalachia or Ozark-Ouachita. The minority ethnic groups affected have distinct histories, but they share a legacy of economic and social suppression. The affected Southern Highland populations are typically white, but have been chronically below average in income because of various circumstances of history, economy, and location. Counties with persistently high poverty contained 30 percent of all nonmetro poor people in 1990. Their future development cannot be addressed without recognizing the special and long-term nature of the poverty-inducing problems that affect them.

At Stake. A majority of the rural poor do not live in the persistently poor counties. But, such counties are the core of the most difficult poverty problems. At stake is a satisfactory overall resolution of rural poverty conditions that cannot be attained without significant progress in the widespread areas where poverty is chronic. Only then can the Nation achieve acceptable levels of living and opportunity in rural and small-town America as a whole.

Alternatives. Many rural people, especially young adults, have solved or attempted to solve their problems by moving to the cities. But prolonged exodus alone does not solve the problems of the source communities and the people remaining behind. Public measures to reduce poverty are typically of three kinds:

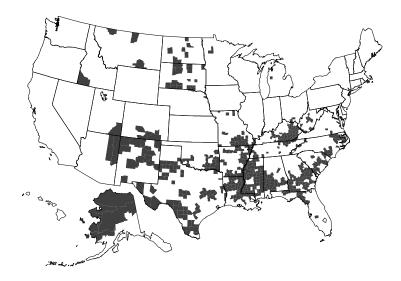
- (1) <u>Cash and cash-equivalent transfers to provide income and services, the so-called safety net measures.</u> These include welfare payments (especially to women with minor children), assistance to the elderly or persons with disabilities, food stamps, public or subsidized housing, and medical care.
- (2) <u>Programs to enable people to become self-supporting</u>. These may involve income support while taking schooling or job training, provision of public service jobs, or subsidy of private employers to hire workers who would otherwise be on welfare.
- (3) <u>Programs to create or preserve jobs.</u> The approach is to help new or existing businesses through direct assistance or by aiding communities to obtain necessary community facilities. Rural and smalltown communities have had access to such programs, but thus far with varying degrees of availability, funding, or effectiveness.

Agenda. Since 1990, two presidentially appointed bodies have studied the problems of rural development and prepared policy recommendations intended to improve the rural economy and rural living. The Clinton administration's economic proposal contains recommendations to improve welfare and education programs and expand rural development efforts. Congress is considering these proposals.

Information Sources. Robert A. Hoppe, *Economic Structure and Change in Persistently Low-Income Nonmetro Counties*, RDRR-50, U.S. Dept. Agr., Econ. Res. Serv., Oct. 1985; *Revitalizing Rural America Through Collaboration*, President's Council on Rural America, Aug. 1992; *Future Directions in Rural Development Policy*, National Commission on Agriculture and Rural Development Policy, Dec. 1990.

Nonmetro counties with persistently high poverty, 1960-90

More than 500 counties have persistent poverty rates of 20 percent or more.



Source: Bureau of the Census.

Economic Research Service

Agriculture Information Bulletin Number 664-59

June 1993

Issues for the 1990's: RURAL ECONOMY

Infrastructure Investment and Rural Economic Development

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Issue. Investing in the quality and quantity of infrastructure, the fixed physical installations and facilities undergirding an area's economic activities, is often cited as a way to promote rural economic development, especially where existing infrastructure is particularly inadequate. This leads to the issue of the proper role of infrastructure investment in a rural economic development strategy.

Context. The most recent, comprehensive national survey of rural infrastructure, conducted in 1981, suggested that basic infrastructure, including roads, bridges, water and wastewater treatment, and fire protection, was available in most rural areas. However, aging and deterioration were reported. More than half of the Nation's 3.1 million miles of rural roads are unpaved, and many that are paved need repairs. Furthermore, 180,000 rural bridges are deficient. Additionally, environmental regulations may require upgrades to facilities to bring them into compliance with more stringent standards. The Environmental Protection Agency estimates that 75 percent of needed improvement in wastewater facilities is located in rural communities with population less than 10,000. This situation, combined with the relatively weak performance of the rural economy, leads policymakers, including the President and Secretary of Agriculture, to call for infrastructure investments to stimulate the rural economy.

Infrastructure by itself is rarely sufficient to promote rural economic development. Other factors such as an educated and healthy workforce, good social institutions, and adequate financial capital are equally important. Infrastructure investments will be most successful in promoting rural development when made part of an area's overall development strategy. Given the increasingly global economy in which rural areas must operate and compete, the ability to connect with large urban centers of economic activity is often critical. Therefore, adequate transportation infrastructure to carry people and freight, as well as high-quality telecommunications infrastructure to carry information, is critical if rural areas are to compete.

Investing in rural infrastructure is important for reasons other than to promote economic growth. The health, safety, environment, and quality of rural life depend heavily on infrastructure. And Federal and State regulations place increasing pressure on rural areas to upgrade infrastructure to meet health, safety, and environmental standards.

At Stake. Livability, economic growth, and compliance with regulations are all at stake. Many rural communities need to upgrade and develop their infrastructure to meet regulatory standards and to protect their health, safety, and environment. In some communities, specific infrastructure investments made as part of an overall development strategy may be needed to promote economic growth.

Alternatives. Infrastructure investments can be financed by either the public or private sectors. The Federal Government provides assistance to rural areas to install or upgrade infrastructure. For example, the U.S. Department of Commerce's Economic Development Administration provides loans and grants for industrial parks, water and sewer improvements, and other investments. Many of these loans and grants are made to rural communities. The U.S. Department of Agriculture provides loans and grants for rural water and wastewater facilities, health care clinics, fire stations and equipment, and other types of community facilities. Some States have similar programs to assist rural communities. For example, Texas has a capital fund that is used, in part, to provide grants for rural infrastructure

investment. Infrastructure investments are usually the province of the public sector. But, private sector investments such as advanced telecommunications can be vital to infrastructure improvement.

Agenda. Congress is considering proposals to increase Federal support for infrastructure investment.

Information Sources. D.W. Sears, T.D. Rowley, and J.N. Reid, *Infrastructure Investment and Economic Development: Rural Strategies for the 1990's*, U.S. Dept. Agr., Econ. Res. Serv., Staff Report AGES 9069, Dec. 1990; J.N. Reid, "Building National Strategies for Rural Economic Development," paper presented at the Agricultural Outlook-USDA, Dec. 1992; *Toward a Federal Infrastructure Strategy: Issues and Options*, Advisory Council on Intergovernmental Relations, Aug. 1992; *Rural America: Worth the Investment*, National Association of Counties, National Association of Development Organizations, and the National Association of Towns and Townships, Jan. 1993.

Economic Research Service

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Issues for the 1990's: RURAL ECONOMY

Workforce Education and Training

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Issue. Policymakers, debating the appropriate Federal role in upgrading worker skills, face an additional question of how education and training policies can best meet the needs of rural people.

Context. Several weaknesses of rural education and training should be addressed as part of the national effort to improve workforce skills. The rural high school dropout rate is still higher than the urban, due largely to pockets of low educational attainment in the South. Rural students' achievement test scores in the South also lag significantly. Rural high schools throughout the Nation offer relatively few advanced academic courses, probably due to small school sizes and limited tax revenues (see chart). The lesser access of rural students to college-prep courses may help explain why fewer rural youths score at advanced levels on achievement tests or attend and graduate from college.

Rural workers receive less training than urban workers, and they fell further behind during the 1980's. Much of the training received by rural workers is informal on-the-job learning, while training for urban workers is more often formal instruction away from the job, either at an alternative site within the firm or at an external site such as a community college. Formal training is required to master many of the more advanced production technologies. The typically smaller sizes of rural firms may be one reason that rural workers receive less training, because larger firms are better able to achieve scale economies in training programs. Another barrier to rural training is the generally greater distance to technical and community colleges.

At Stake. Improved education and training are critical for rural workers because access to good jobs is increasingly limited to individuals with advanced job skills. The stakes go beyond the well-being of individual rural workers and their home communities, however. Many of the best educated and best trained rural workers migrate to urban centers for better jobs.

ERS research suggests that the local economic development potential of increased investments in workforce skills is quite limited for most rural communities. Lower education levels do not appear to have been associated with slower economic growth in rural areas in either the 1970's or 1980's, after controlling for other factors that affect local economic growth, such as industry mix. One reason is that the firms placing the greatest premium on high skill levels, such as high-tech manufacturers, tend to locate in large urban areas near research universities and suppliers of advanced producer services. It therefore seems unlikely that increased workforce education and training, by themselves, can improve the competitive position of most rural areas.

Education and training initiatives probably can contribute to economic development in some rural areas, where they can be accompanied by successful efforts to increase local demand for higher workforce skills. These high-skill development strategies will not succeed unless rural workers actually have the required skills.

Alternatives. Several types of policies might help rural people participate in national efforts to upgrade schools and workforce training. Expanding early intervention programs, such as Head Start, extended in some form through elementary and secondary schools, might be an effective response to high dropout rates and low school achievement because these problems are most severe in high-

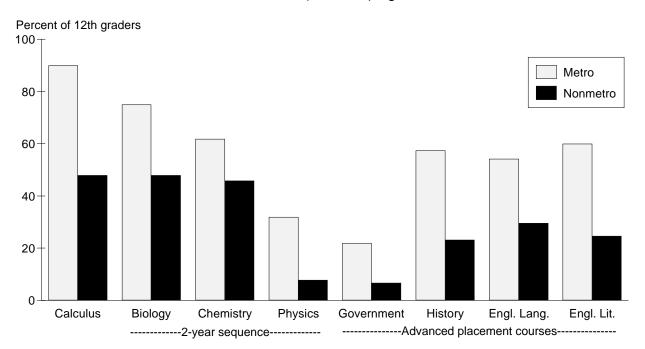
poverty areas. High school programs that integrate academic study, vocational training, and work experience for noncollege-bound students may be especially valuable in rural communities, where fewer jobs require college degrees. Innovations such as distance learning (use of telecommunications to connect rural students to classes taught in larger communities) can make more advanced curricula available to students in remote locations. Public policy might also promote high-skill growth in some rural areas through investments in fiber optic lines or other forms of geographically integrating infrastructure. Expanded technical and training support to small rural firms wishing to use advanced technologies also appears promising.

Agenda. Congress is considering the Clinton administration's economic program, which proposes to increase investment in education, job training, and technical assistance for small firms, and to develop a national telecommunications network linking schools, businesses, and government.

Information Sources. U.S. Dept. of Agriculture, Economic Research Service, *Education and Rural Development: Strategies for the 1990's*, Staff Report AGES 9153, Sept. 1991; Ruy Teixeira and Lawrence Mishel, "Upgrading Workers' Skills Not Sufficient To Jump-Start Rural Economy," *Rural Development Perspectives*, Vol. 7, Issue 3, June-Sept. 1991; and Elizabeth Greenberg, Paul Swaim, and Ruy Teixeira, "Can Rural Workers Compete for the Jobs of the Future?" *Proceedings of Agriculture Outlook '93*, U.S. Dept. Agr., Mar. 1993.

Availability of advanced curricula in metro and nonmetro high schools

Fewer advanced classes are available in rural (nonmetro) high schools.



Source: National Assessment of Educational Progress, 1988 and 1990.

Economic Research Service

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Issues for the 1990's: RURAL ECONOMY

Areas Where Farm Program Payments Are Important

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Issue. Counties with high government farm payments depend almost twice as much on farm and closely related employment as does the Nation as a whole. Not only has total employment growth slowed in these counties, but farm and farm-related employment base has declined by one-fifth, or over one-half million jobs.

Context. Farm program payments have little or no significance for a majority of U.S. farmers and farm-based communities. But, government payments do play an important role in income support and provide longrun income stability for a substantial percentage of U.S. farmers who produce wheat, feed grains, rice, and cotton. Government payments averaged 6.6 percent of gross U.S. farm income between 1986-90. In many counties where program crops dominate farm production, farm commodity payments exceeded the national average by two or three times. Government payments to farmers averaged \$12.6 billion during this 5-year period, with over 70 percent consisting of deficiency payments to producers of wheat, feed grains, rice, and cotton. Government farm payments peaked at \$16.7 billion in 1987, dropping to \$9.3 billion by 1990.

Counties with significant government payments are concentrated in the spring wheat and barley areas of the Northern Plains, winter wheat and sorghum areas of the Central Plains, cotton, wheat, and sorghum areas of West Texas and southwest Oklahoma, and cotton, rice, and wheat areas of the Mississippi Delta and gulf coast. Government payments account for more than 20 percent of gross farm income in many of these counties. There were 378 counties where government payments as a percentage of gross farm income exceeded twice the national average of 6.6 percent, and 107 where they exceeded three times the national average (see map). A majority of the counties most dependent on program crops are in North Dakota, Montana, West Texas, and the Mississippi Delta.

At Stake. Federal support for farm programs has declined, and there is continued pressure for reduced payments. Cuts in farm commodity programs will alter the structure of farming in areas that rely heavily on program crops. Even without substantial changes in farm payment provisions, many of these sparsely settled counties will find it difficult to sustain their employment base and maintain local services.

Alternatives. Counties where program payments are most important may need assistance in diversifying their economic base with nonfarm jobs. Activities adding value to farm products are one possible option, but this option will not lead to new jobs in all farm-based communities. These counties could be the prime targets of rural development initiatives.

Agenda. Rural development programs that help farm program-dependent areas diversify their economic base can play an important role in the policy agenda. This might include programs that acquaint community leaders with ways to expand their nonfarm economic base and likewise inform industry leaders on the merits of these communities as possible sites for industry expansion.

Information Source. Mindy Petrulis, Thomas A. Carlin, and Wyn Francis, *Agriculture-Related Employment: Farm Commodity Programs and Rural Economies*, AIB-613, U.S. Dept. Agr., Econ. Res. Serv., Sept. 1990.

Structure and importance of farming in program-dependent counties, 1975-89

Counties most dependent on farm programs experienced little overall employment growth in recent years.

		Government farm payments as a percentage of gross farm income				
Item	United States	Above national average of 6.6 percent	6.6-13.2	13.3-19.9	20.0+	
			Number, 1987			
Counties Farms	3,141 2,087,759	1,218 868,695	840 650,346	271 161,565	107 56,784	
		Percer	nt of farm sales,	1987		
Principal program crops: Most important 2nd most important 3rd most important	Corn (7.8) Wheat (3.5) Cotton (3.1)	Corn (14.9) Wheat (6.6) Cotton (4.4)	Corn (16.2) Wheat (3.9) Cotton (2.0)	Corn (14.4) Wheat (10.6) Cotton (9.3)	Wheat (26.7) Cotton (17.2) Rice (13.4)	
		Percent of	f total employme	nt, 1989		
Farm and closely related industries Farm inputs Farm production Farm processing and marketing	5.1 0.3 2.4 2.4	9.4 0.8 6.0 2.6	8.8 0.7 5.5 2.6	12.3 1.4 7.8 3.1	16.1 1.2 12.1 2.4	
		Percent chan	ge in employme	nt, 1975-89		
Farm and closely related industries All industries	-15.8 44.6	-22.8 29.1	-21.2 32.4	-26.8 18.0	-29.4 0.6	

Issues for the 1990's: RURAL ECONOMY

Economic Research Service

Population Loss in Remote Rural Areas

Agriculture Information Bulletin Number 664-70

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Issue. During the 1980's, the nonmetropolitan (nonmetro) population grew by only 4 percent, a drop of 10 percentage points from the 1970-80 rate and considerably less than the 12 percent metro growth in the 1980's. Some nonmetro counties grew rapidly, but over half lost population. The population loss was most prevalent in the more sparsely settled, remote rural areas, making delivery of public services in these areas more difficult and expensive and raising questions of survival for many communities.

Context. Rural population settlement was once organized largely around extractive industries—agriculture, forestry, and mining—and the delivery of services to both those industries and the people associated with them. As employment in extractive industries declined, manufacturing growth absorbed some of the labor, but rural settlement has become increasingly organized in proximity to expanding urban areas and natural amenities. The importance of natural resources, climate, and environment for the rural economy has shifted from resource exploitation toward attractiveness to working families, retirees, and vacationers. One consequence of this shift has been a wide disparity among rural areas in the direction and rate of population change.

Much of the rural middle of the country lost population in the 1980's, while the rural West, Southwest, and some of the South gained population. This shift generally represents a movement from remote rural counties with relatively few natural amenities to high-amenity areas, especially those areas with access to major urban centers. The population in counties both in the top 20 percent on an Economic Research Service natural amenity scale and adjacent to metro areas grew by 61 percent between 1970 and 1990. In contrast, remote, low-amenity counties lost population. High-amenity areas were defined by relatively warm, sunny winters; cool, dry summers; lakes or other water; varied topography; and low elevation.

Declines in population associated with farming and mining contributed to much of the rural population loss (see table). About three-fourths of the 900 counties specializing in these industries lost population in the 1980's. Lacking natural amenities and distant from large urban centers, many of these counties are unable to develop recreation, retirement, or other amenity-related industries or become bedroom communities (areas occupied mainly by commuters). Manufacturing appears to reduce the effects of having relatively few natural amenities, however, as manufacturing counties with few amenities were much more likely to gain population during 1980-90 than other low-amenity counties.

At Stake. Rural areas adjoining growing metro areas and areas attractive to vacationers and retirees are likely to continue to grow; in fact, a desire to limit growth actually becomes an issue in some cases. For rural communities dependent on manufacturing, the problem will be to maintain or enhance competitiveness in an increasingly global economy. (See *Rural Manufacturing Links to Rural Development*, AIB 664-52). Further population decline seems most likely for sparsely settled, remote rural areas dependent on farming or mining and lacking popular natural amenities. Moderate decline does not in itself present a problem. Poverty and unemployment rates are not particularly high in the rural upper Midwest, for instance, in part because of high rates of outmigration. But population loss does put added strain on service delivery systems.

Alternatives. Sparsely settled, remote, amenity-poor rural regions highlight a basic development problem. If one believes that government should attempt to provide everyone equal access to services, irrespective of residence, low rural population density prevents schools, hospitals, and other services from being both nearby and sufficiently large to offer a variety of services. The small size of jurisdictions further complicates the issue.

Agenda. New technologies, particularly information technologies, can increase the effective scale of some services available to rural residents and thereby reduce cost. Some regions, particularly in the Midwest, are actively organizing intercommunity cooperation.

Information Sources. Rural Conditions and Trends, Vol. 4, No. 3, Fall 1993.

Average metro and nonmetro population and population change, 1980-90

Population declined in remote counties without market centers and in mining and farming counties.

	Co	ounties	Population		
County type	Total	Losing population	Total	Change, 1980-90	
	Number	Percent	Millions	Percent	
Total	3,097	45.2	248.7	9.8	
Metro	714	19.0	192.0	11.6	
Nonm etro	2,383	53.1	56.7	4.2	
Adjacent to metro	918	39.8	28.6	6.6	
Not adjacent	1,465	61.4	28.1	1.2	
Center of 10,000+	295	43.1	13.3	4.4	
No large center	1,170	66.1	14.8	-0.7	
Economic type ¹					
Farming	695	74.7	7.8	-0.7	
Mining	202	72.8	3.7	-4.2	
Manufacturing	656	43.2	22.0	2.5	
Natural amenity	429	23.7	12.3	16.3	

¹Based on percentage of county earnings in: farming (over 20 percent in 1976-79), mining (over 20 percent in 1979), and manufacturing (over 30 percent in 1979) with some overlap. Natural-amenity counties fall in the top 20 percent on amenity scale.

Nonmetro counties with population loss, 1980-90

Loss is most prevalent in remote areas.

Nonmetro counties ranking high on natural-amenity scale

Few high-amenity counties lost population.

